

FINAL NOTICE!!!

IF THE OFFER IS NOT CONSUMMATED, MGF WILL FILE A PETITION FOR REORGANIZATION PURSUANT TO CHAPTER 11 OF THE UNITED STATES BANKRUPTCY CODE.

This is neither an offer to exchange or sell nor a solicitation of an offer to buy or exchange any security. The Offer is made only by the Prospectus dated August 20, 1984 and the related Letters of Transmittal. The Offer is not being made to, nor will tenders be accepted from, holders of these securities in any jurisdiction in which the making or acceptance thereof would not be in compliance with the securities laws of such jurisdiction.

MGF Oil Corporation

Offer to Exchange
1,532,150 Shares of its
Senior Convertible Preferred Stock
and
34,327,590 Shares of its Common Stock
for any and all of

MGF International Finance N.V.'s
Class A and Class B Non-Interest Bearing Convertible Senior
Subordinated Guaranteed Debentures Due 1989 ("0% Debentures")
8 3/4% Convertible Subordinated Guaranteed Debentures
due 1995 ("8 3/4% Debentures")

MGF Oil Corporation ("MGF") hereby offers upon the terms and subject to the conditions set forth in the Prospectus dated August 20, 1984, as supplemented, and in the accompanying Letters of Transmittal (which together constitute the "Offer") to exchange 1,532,150 shares of its Senior Convertible Preferred Stock, par value \$1.00 per share ("Preferred Stock"), and 34,327,590 shares of its Common Stock, par value \$0.01 per share ("Common Stock"), for any and all of the 0% and 8 3/4% Debentures (collectively, the "Old Securities"), as follows: (i) for each \$1,000 principal amount of 0% Debentures (which must include a Class A and Class B 0% Debenture), 44 shares of Preferred Stock and 986 shares of Common Stock; and (ii) for each \$1,000 principal amount of 8 3/4% Debentures, 44 shares of Preferred Stock and 986 shares of Common Stock. All accrued and unpaid interest will be cancelled with respect to tendered and accepted Old Securities.

The Preferred Stock will be convertible into shares of Common Stock at the following rates: (i) through October 1, 1989, 8 shares of Common Stock for each share of Preferred Stock; (ii) October 2, 1989 through October 1, 1994, 10.8 shares of Common Stock for each share of Preferred Stock; and (iii) after October 1, 1994, 16 shares of Common Stock for each share of Preferred Stock. Holders of Preferred Stock will be entitled to receive cumulative dividends, accruing from July 1, 1987, at the annual rate of 5.15 per share, and no more, payable in cash or shares of Common Stock, at MGF's option. The Preferred Stock will be nonvoting as to most corporate matters, will provide for a preferred cash payment in the event of MGF's liquidation and will be redeemable on and after January 1, 1986.

The Offer will expire at 3:00 P.M., New York City Time, on October 17, 1984 and will not be extended.

All tenders of Old Securities will be irrevocable if accepted by MGF prior to 6:00 P.M., New York City Time, on October 17, 1984.

The purpose of the Offer is to eliminate \$34,815,000 aggregate principal amount of Old Securities and \$130,055,500 of other indebtedness of MGF and to reduce MGF's secured bank indebtedness by \$29,578,223. MGF believes that following consummation of the Offer, it will be able to (i) remain a viable entity without the need for bankruptcy court protection and (ii) discharge its remaining debt obligations in the ordinary course of business.

One of the conditions precedent to consummation of the Offer is that 95% aggregate principal amount of each class of Old Securities must be tendered in the Offer. If the Offer is not consummated, MGF will not have sufficient cash flow to pay its debt obligations as they mature and will seek protection from its creditors by filing a petition for reorganization pursuant to Chapter 11 of the United States Bankruptcy Code. If a Chapter 11 filing occurs, MGF currently intends to present as its plan of reorganization a plan substantially identical to the restructuring plan set forth in the Prospectus.

THE INFORMATION STATED HEREIN INCORPORATES BY REFERENCE, AND IS QUALIFIED IN ITS ENTIRETY BY, THE DOCUMENTS CONSTITUTING THE OFFER.

The Certificate of Incorporation of MGF and a legal notice relating to the Offer have been filed with the Chief Registrar of the District Court of Luxembourg, where copies may be obtained upon request.

Officers with questions concerning the Offer may contact W. Phillip Marcum or Bobby W. Page of MGF by collect telephone call to (915) 685-9700, telex 743-472.

In order to obtain promptly, at the expense of MGF, the documents constituting the Offer, contact:

By Mail
or by Hand

Banque Internationale à Luxembourg, S.A.
Two Boulevard Royal
Luxembourg
Attention: Daniel Schammo
or Gilles Reiter

Facsimile

Telephone: 352-4791354
Telex: 3626
Teletype: 352-27913
Attention: Daniel Schammo
or Gilles Reiter

OVERSEAS NEWS

Andreotti denies he aided Sicilian financier

BY ALAN FRIEDMAN IN MILAN

SIG GIULIO ANDREOTTI, Italy's Foreign Minister, yesterday denied allegations that he had ever aided Sig Michele Sindona, the Sicilian financier. Sig Sindona was last week extradited from the U.S. to Italy to face charges of conspiracy to murder, extortion and fraudulent bankruptcy. Sig Sindona is already serving a U.S. prison sentence for offences related to the collapse of his U.S. bank.

On Thursday night the Chamber of Deputies rejected a motion calling for Sig Andreotti to resign because of suggestions about his alleged assistance to Sig Sindona. The motion was defeated by 199 to 101 and did not pass because 194 Communist deputies abstained. Over the weekend, however, the Communist Party changed its tactics and is now calling for Sig Andreotti to resign.

Sig Bettino Craxi, the Prime Minister, is doing his best to stay out of the political fray, leaving the defence of the veteran Sig Andreotti to the

Christian Democrats, Sig Andreotti's party. Sig Andreotti defended himself yesterday in a lengthy front page article he wrote for Il Tempo newspaper. He declared that Sig Sindona had "never asked me for favours." He added that the campaign against him might be inspired by those forces wishing to prevent him from being considered as a contender for Italy's presidency, or by those who do not like his foreign policy. The presidential election is next year.

The allegations against Sig Andreotti, made initially by the tiny Radical Party but now being given national prominence, are that Sig Andreotti in 1974 tried to help Sig Sindona when the latter's banking empire was collapsing. According to Milan judges Sig Andreotti may be called to testify next spring at the Sindona trial. The judges say that if asked to appear, Sig Andreotti might be able to re-construct some of the events relating to Sig Sindona's fortunes in the 1970s.

Nato 'would welcome' stronger European defence identity

BY BRIDGET BLOOM, DEFENCE CORRESPONDENT, IN LONDON

THE CREATION of a European defence identity would be a means of strengthening the defence of the North Atlantic Treaty Organisation as a whole and would be welcome. Lord Carrington, Nato's Secretary General said last night.

Lord Carrington said he welcomed the forthcoming meeting of the Western European Union, which groups seven of Nato's 14 European members, including Britain, France and West Germany.

The meeting will involve both foreign and defence ministers of the seven in Rome at the end of this month. The ministers will examine ways of relaunching the WEU, formed in the 1950s, as a forum for improving European defence co-operation.

Lord Carrington said his only reservation about such a move was that the U.S. should not see it as an attempt by Europe to "de-couple" Europe from the U.S. Provided the U.S. was not suspicious about the motives behind a relaunched WEU, the move would be "an excellent thing".

Lord Carrington said a greater focus on Europe could help the electorates of individual nations more to accept more readily necessary expenditure on defence.

Lord Carrington was giving his first British television interview since becoming secretary general last June.

He described his three priorities as being to maintain deterrence against the military threat from the Warsaw Pact to achieve a better East-West political relationship and to make sure that Europe and America did not drift apart.

He believed the perception of some influential U.S. senators that Europe was failing to contribute its full share to Nato's defence could lead to a "situation of very considerable gravity unless action was taken."

Lord Carrington said a greater focus on Europe could help the electorates of individual nations more to accept more readily necessary expenditure on defence.

Pan Am to shed 900 more jobs and close down some centres

BY WILLIAM HALL IN NEW YORK

PAN AMERICAN World Airways, the big U.S. airline which has lost some \$650m over the last three years, is making 900 of its U.S. staff redundant and closing three of its nine reservation centres in the country to cut costs.

The airline, which came near to bankruptcy in 1982, said the layoffs - equivalent to just under 4 per cent of the domestic workforce - "reflect the downsizing the airline has gone through over the past several months." The number of seat miles flown by Pan Am, a good proxy for capacity, is 6 per cent down on a year ago.

The biggest staff cuts are centred in Chicago and New Orleans, where Pan Am is closing two large reservation centres. The airline is also closing its Hawaii reservation centre, employing 35 staff, and making cuts in ground staff and management personnel. Pan Am employs 27,400 staff worldwide, of which 23,000 are based in the U.S.

The airline which recently signed a \$1bn order with Airbus Industrie, the European consortium, to modernise its ageing fleet has been bedevilled by cost difficulties and its survival is due largely to the \$325m in wage concessions granted by its workforce in recent years.

The company faces key wage negotiations over the next few months and Wall Street analysts say the outcome of the negotiations will be critical to the company's long-term future. Pan Am said the latest cuts were in no way connected with the forthcoming wage negotiations.

Meanwhile troops appear to have been used for the first time in support of police engaged in anti-riot duties over the weekend in the black townships of Jozz close to Fort Elizabeth.

FINANCIAL TIMES, USPS No. 106640, published daily except Sundays and holidays. U.S. subscription rate \$40.00 per annum. Second class postage paid at New York NY and at additional mailing offices. POSTMASTER: send address changes to FINANCIAL TIMES, 14 East 60th Street, New York NY 10022.

Swedish economic recovery forecast to falter next year

BY KEVIN DONE, NORDIC CORRESPONDENT, IN STOCKHOLM

THE STRONG export-led growth in the Swedish economy over the last two years is expected to slow to only 2 per cent at an annual rate in 1985, according to the country's National Institute of Economic Research.

Higher costs and higher inflation will slowly undermine Sweden's competitiveness in foreign markets as the benefits of the 1981-82 devaluations are eroded, a report by the institute states. The economy is likely to grow about 3 per cent in real terms this year.

The institute makes clear that Sweden's inflation rate, which is still running well above that of its main competitors such as West Germany, will still be as high as 6 per cent by the end of 1984 compared with the government target of 4 per cent.

It expects wage costs to rise by 7 per cent in 1985 compared with the government's goal of 5 per cent, giving a rise in inflation of at least 4.5 per cent.

An even more pessimistic outlook is given by the latest forecast from Svenska Handelsbanken, the country's second largest bank, which indicates a jump of 8.5 per cent in wage costs and a slowing in the volume of exports to only 3 per cent compared with 7 per cent this year and 11.5 per cent in 1983.

Handelsbanken says that the two devaluations have only given temporary relief to the Swedish economy. "Current trends indicate that we are on the way to new crises," says the report which will give rise to concern in the government as it approaches next year's election.

Iceland airport blockade eased

PICKETS TAKING part in a public sector strike in Iceland eased their blockade of the country's only international airport last night and state radio resumed newscasts for the first time in a week. Reuter reports from Reykjavik.

Workers blocking the airport gates as part of the strike, launched on Thursday by the 17,000-strong public sector unions against the Right-wing government's economic policies, agreed to allow through passengers from incoming flights.



Could this be YOU in a few years' time? — remembering when milk was 10p a pint.

Never thinking that one day buying another pint of milk would be a decision calling for a second thought. These are the needy whose provision for their twilight years was fixed at a time when index-linked pensions had yet to be invented and inflation was never envisaged.

The DGAA is not State aided, so please help us to help more needy people to stay in their own homes in their declining years. And when they can no longer manage at home, help us to maintain our Residential and Nursing Homes so that we can continue to provide friendly accommodation to meet their needs.

A donation, conventional subscription or legacy would do so much for those unable through age or infirmity to help themselves... please like you.

THE DISTRESSED GENTLEFOLK'S AID ASSOCIATION
Founded 1897, Patron H.M. Queen Elizabeth, the Queen Mother
Dept 7, 71 Warwick Way, London W14 6LJ, Tel: 01-222 9345
HELP THEM GROW OLD WITH DIGNITY



A world of serenity and space surrounds First Class passengers to Japan.

Flying JAL First Class takes you into a world of tranquillity, space and attentive, unobtrusive hospitality.

It's a tradition of service that has helped us become Number One - *ichi-ban* - among international scheduled airlines (IATA statistics 1983).

Relax and enjoy it all on our daily flights to Tokyo and beyond.

Let the world go by as you sink back into your sumptuously padded Sky Recliner seat. Take your time as you select from our superb choice of Japanese and International menus.

Enjoy a quiet drink as the calm, thoughtful service adds more and more to your comfort. Take pleasure in the Japanese way of doing things. Hot *oshibori* towels. Warm *sake*. Happy coats.

Countless courtesies like these add to the tranquil, but luxurious, pleasure of flying Japan Air Lines First Class.

It is a very great honour for us to be Number One. An honour for which we thank everyone who has chosen JAL.

JAPAN AIR LINES
The longer the flight, the more the details matter.

Change of Address

SOCIÉTÉ GÉNÉRALE

Société Générale is pleased to announce the opening of its new main U.K. Branch at

60 Gracechurch Street, London EC3V 0HD
Telephone: 01-626 5400 (new number)
Telex: 886611 (unchanged)

Foreign Exchange	01-626 1201/4
Sterling Dealers	01-626 1205/7
Corporate Dealers	01-626 1208/9
Dealing Room Telexes	883098/885846/888077/8811906

Provincial Branches Birmingham, Bristol, Leeds and Manchester
Representative Office Edinburgh
Head Office 29 Boulevard Haussmann-75009 Paris

OVERSEAS NEWS

Filipino businessmen demonstrate against Marcos government

BY EMILIA TAGAZA IN MANILA

PHILIPPINE businessmen and commercial creditors for a recovery programme is aimed principally at helping businessmen and that they would be working against the best interest if they destabilise the government through demonstrations, he said. The Philippines is trying to complete negotiations with the IMF for a \$615m (£500m) standby credit, and with foreign banks for a re-scheduling of loans and for some new money. The country's foreign debt problems were triggered late last year by a huge flight of capital when business confidence faltered. It was late last year, after the assassination of Mr Benigno Aquino, the opposition leader, that businessmen and Manila's middle class started to turn up in large numbers in anti-Marcos rallies. Mr Marcos backed down over yesterday's rally and averted a possible showdown by authorising the issuance of a permit for it, after asking for assurance from the businessmen's group that it would keep the demonstration peaceful and orderly.

Banks face dilemma over loans to Peru

By Peter Montagnon, Euromarkets Correspondent

PERU'S creditor banks face an agonising choice over a plan for them to disburse \$100m in loans arranged last year, in spite of the fact that the government of President Fernando Belaunde Terry is in breach of its International Monetary Fund Economic targets. The plan was put forward at a meeting of bank creditors last week as one means of allowing Peru to clear interest arrears on its debt to commercial banks. The late payments will amount to \$20m at the end of this month. Under a compromise similar to those already worked out for Argentina, the idea is that Peru should draw on its \$950m foreign exchange reserves to make up the rest of the arrears, so that banks will receive more money back from Peru than they actually put in. But many of the banks on the committee of leading creditors, which is chaired by Citibank, are reluctant to make any fresh money available to Peru until it reaches a new agreement with the IMF. The banks' irritation has increased because the Peruvian delegation failed to show up at last week's talks. A further meeting is planned shortly amid worries that U.S. banks may have to declare their loans to Peru as sub-standard if the interest arrears cannot be paid. Peru has not been paying interest since last July and has failed to complete arrangements to reschedule some \$2.6bn in foreign debt. As an interim measure banks have been asked to roll forward the maturity of the debt to be rescheduled to December 10 from October 10, but there are growing doubts that the rescheduling can be completed even by then as resistance mounts in Lima to the IMF austerity programme.

Israel is asking the U.S. for help out of an economic crisis. David Lennon reports Peres puts faith in his powers of persuasion

MR SHIMON PERES, the Israeli Prime Minister, insists that he is not flying into Washington today cap in hand to beg for a cash hand-out to rescue Israel from its self-inflicted economic woes.

But there is little doubt that ways to help Israel out of its economic crisis will be at the top of the agenda in his meeting with President Ronald Reagan and even more so in his meetings with Mr George Shultz, the Secretary of State, who has taken a personal interest in the Israeli economy. Mr Peres will tell his hosts that Israel has begun taking the necessary measures to combat 400-800 per cent inflation and a more than \$5bn (£3,220m) deficit on the current account of the balance of payments. Where Israel needs help, he will say, is in coping with its falling foreign currency reserves, \$22bn foreign debt and funds to fuel a renewal of economic growth. The success of the Labour Party leader's first visit to the U.S. capital as premier will be measured by the degree of economic support he can muster. The issues of Europe withdrawal from Lebanon, improving relations with Egypt

and expanding the peace process to include Jordan will all be secondary.

It will take all of Mr Peres' persuasive powers to convince his hosts that the steps taken by his government in its first three weeks in office constitute a sound basis for the economic reform programme which his government wants to implement. Mr Shultz and others will have much ammunition at their disposal to question the adequacy and the efficacy of the government's economic measures. This has been provided by members of Mr Peres' own Cabinet, who have openly expressed their disappointment at what has been achieved so far.

When the multi-party coalition was formed after weeks of haggling, everyone expected it to move rapidly to implement a comprehensive economic reform policy. Instead, the Cabinet has slowly approved a series of piecemeal measures for curbing private demand and announced that it would cut \$1bn from the budget of approximately \$20bn. A key element in any recovery programme has to be a curb on Israel's rampant inflation. It was running at an

annual level of 400 per cent until the latest economic measures were imposed and these are expected to push it up to 800 per cent. Mr Yitzhak Modai, the Finance Minister, admitted last week that this is inevitable. He expects the monthly inflation rate to exceed 20 per cent for each of the next three months. After that his measures will begin to force inflation down, he hopes.

The key lies in a freeze on wages and prices. The government is hoping that this can be achieved through a voluntary agreement with the powerful Histadrut Trade Union Federation and the Manufacturers' Association. This agreement was to be based on a partial suspension of the automatic cost of living supplements paid monthly to workers to compensate for inflation. But the Histadrut is reluctant to agree to this. During the past five years of hyper inflation the linkage of wages to the cost of living index has been the only safeguard of its members' income. Mr Gad Yacobi, the Minister of Economic Co-ordination, admitted ruefully the other day: "I believe that we have missed the opportunity for a dramatic turning point in the sphere of curbing inflation. If we don't reach agreement with the unions and manufacturers the only alternative is a serious economic and social crisis."

Some American economists have described the measures taken so far as "shooting from the hip," meaning that they are hasty reactions to the situation rather than a well thought out and comprehensive policy. Mr Gideon Pat, the Minister of Science and Development, admits: "We have an immediate problem, but we are not behaving as though this was the case. We are improvising, here and there, some economic steps. I don't think that even as persuasive a person as Shimon Peres can explain that thus we have lightened the belt and that we have taken upon ourselves the burden of curing the economy."

Israel has been unable to halt this drain by borrowing from the international banks, which refuse to increase their lending. Mr Peres will be seeking U.S. assistance in this sphere. The measures which have been taken by the Government so far are regarded by many people as inadequate. The measures taken include subsidy cuts, re-introducing high school fees, taxing children's allowances, halving the foreign currency allowance for travellers and import restrictions. Some American economists have described the measures taken so far as "shooting from the hip," meaning that they are hasty reactions to the situation rather than a well thought out and comprehensive policy. Mr Gideon Pat, the Minister of Science and Development, admits: "We have an immediate problem, but we are not behaving as though this was the case. We are improvising, here and there, some economic steps. I don't think that even as persuasive a person as Shimon Peres can explain that thus we have lightened the belt and that we have taken upon ourselves the burden of curing the economy."

Arrests follow Indonesian bomb attacks on Chinese

BY CHRIS SHERWELL, SOUTH EAST ASIA CORRESPONDENT

INDONESIAN police say they have arrested several people following last Thursday's bomb attacks on Chinese-owned businesses, which left two dead and 16 injured in the capital, Jakarta. The attacks, for which no one has claimed responsibility, were the first in years, and came three weeks after at least nine people were killed when Jakarta's dockland was rocked by some of the country's worst rioting in a decade. Western diplomats think that the two incidents may be linked, but officials are not commenting. President Suharto last Friday said the country had reached a "dangerous" stage. The two incidents seem likely to unsettle Indonesia's 5m Chinese.

Chile threatens legal action against unions

By Mary Helen Spooner in Santiago

CHILE'S Interior Minister, Sr Sergio Jarpa warned that legal action would be taken against the opposition trade unions who called for a general strike against Gen Augusto Pinochet's regime on October 30. The National Labour Command, an umbrella organisation of dissident labour groups, issued the call for the strike last Thursday, citing recent price rises in the wake of last month's devaluation. Sr Jarpa said the authorities would either file suit in court or take other measures, suggesting that the Pinochet regime might use its special powers under the state of emergency to deport the strike leaders or send them into internal exile. Chilean authorities brought suit against the organisers of last month's anti-government protest, but the courts have yet to take any action against the defendants.

Conditions for British EMS entry 'better than ever'

BY ALEXANDER NICOLL IN LONDON

THE CONDITIONS for British entry into the European Monetary Union are better than at any time in the system's 5½-year life, argues a report by two UK economists. Mr Geoffrey Dennis, senior economist at London stockbrokers W. Greenwell, and Mr Joseph Nellis, a lecturer at Cranfield School of Management, writing in the quarterly Lloyds Bank Review, note a "remarkable" ability of successive

British governments to argue against full EMS membership. Britain does not participate in the exchange rate mechanism, in which currencies are kept in fixed, negotiated bands, but does take part in other co-operative arrangements. The present configuration of relevant factors including the current design of macroeconomic policy, the level of sterling against EMS currencies and the gradual, but inevitable, decline of the petro-status of the pound makes full membership of the EMS particularly appropriate, Mr Dennis and Mr Nellis say. They argue that the eight EMS member currencies have been markedly less volatile than currencies outside the system, and that its success in overcoming several crises has demonstrated its flexibility. The economic performance of EMS member countries has shown an impressive degree of convergence since 1981, the two men write, although they acknowledge that this has been only partly due to the EMS itself, and that significant differences remain. "The performance of the UK as an average member of the low-inflation group in the EMS is, however, both encouraging and wholly compatible with sterling's entry into the exchange rate mechanism," they say. Answering fears that sterling's tendency to move in tandem with the dollar could create problems for the UK Government if the pound was an EMS member, Mr Dennis and Mr Nellis say a common European strategy could be forged towards the dollar and U.S. interest rate policy.

Malaysia supports currency

BY WONG SIAO IN KUALA LUMPUR

Malaysia's Prime Minister, yesterday squashed fears of a Malaysian devaluation, following strong pressure against the ringgit last Friday. Datuk Musa confirmed that the Malaysian central bank had intervened to support the ringgit, but added: "The subject is very sensitive. I am not willing to say anything more save to categorically state there will be no devaluation of the ringgit." The strong pressure of the currency began on Friday when the ringgit fell more than 10 per cent below the Singapore dollar, and this sparked off fears of an impending devaluation. Traditionally, the Malaysian central bank had intervened to ensure the ringgit never breached that level. However, the central bank intervened to sell U.S. dollars, and buy ringgit which closed at 2.57 compared with Thursday's 2.57.

Civilian courts to try military

ARGENTINA'S FEDERAL Appeals Court has announced that the nine members of the three former juntas will now be tried by civilian courts but that other middle and junior ranking officers should continue to come under the jurisdiction of military courts, Jimmy Buras writes from Buenos Aires.

The decision not to extend the October 11 deadline for a military verdict on the juntas opens up the prospect of a bitter conflict over jurisdiction between the military and civilian powers. In theory the government should be able to ensure an early judgment on the juntas

Now your dollar investments can be on Wall Street one minute and in your wallet the next.

Dollar investments have always had one major drawback for Europeans. Illiquidity. But not any more. Because Merrill Lynch, the leading Wall Street investment firm, has created a new kind of brokerage account for shares and bonds that gives easy access to your dollar assets. The Merrill Lynch Cash Management Account* International (CMA* I) puts your money exactly where you want it when you want it. At any time, you can use the capital invested in securities without having to sell them. You simply write a cheque or use a special VISA card whenever you want to make purchases or get cash advances in local currency. CMA* I even gives you an automatic line of credit up to the full margin value of your securities. So you can always move quickly whether you want to make new investments or buy something more personal. Over 1 million demanding investors have already centralised their assets in this way and now the CMA* I has been specially adapted to better suit the needs of European investors. Your cash doesn't sit idle. All dividends and other income are automatically swept into an interest-bearing account at Merrill Lynch International Bank Ltd (London). So all your cash keeps working virtually all the time - completely free of U.S. withholding taxes. And every month, you receive a clear statement that conveniently lists all transactions and

gives a reconciliation of your account day-by-day. \$10 million worth of protection. Not only is the CMA* I account a most convenient place to hold your securities, it is also safe. Because every customer's account is protected by the Aetna Casualty and Surety Company for up to U.S. \$10 million. Ultimately, timely advice is a vital concern to investors with a serious interest in North American markets. In the United States, investment professionals consistently name the Merrill Lynch team as the top rated research team on Wall Street. Every CMA* I is serviced by an Account Executive,

Because there's advice, and there's Merrill Lynch advice.

who in turn is supported by this superior source of investment information. No-one else can help you build such a solid, well-integrated portfolio of dollar investments. For more information, including a brochure containing all sales charges and expenses, please telephone us on 01-382 8849 or send in the coupon. To open a CMA* I account, you should have U.S. \$25,000 in cash and securities. But send no money until you have read all the information.

THE U.S.A. is the world's most competitive market for micros. Which leading European computer company achieved most of its turnover there last year? 7A TRIUMPH ADLER 7A - World Leaders in Office Communication For the answers to your business computing questions ring Kate Myles at Triumph Adler on 01-250 1717.

WESTERN CORRUGATED LIMITED £275,000 To finance a new venture in Wales to manufacture corrugated fibre board sheet. Arranged and provided by WELSH DEVELOPMENT AGENCY 8th October 1984

Return this coupon to: Frank P. Grillo, CMA Manager, Merrill Lynch Pierce Fenner & Smith Ltd., Merrill Lynch House, 27 Finsbury Square, London EC2 1AQ. Alternatively, telephone 01-382 8849 or telex 8811047. Name: Address: Tel. No(s) Home: Business: Merrill Lynch *Registered Trade Marks of Merrill Lynch & Co. Inc.

WORLD TRADE NEWS

Bridget Bloom reviews efforts by France and the UK to win a £4bn U.S. army deal
Bids for a battlefield system make history

WHEN A LARGE truck drove up to a U.S. Army building in Fort Monmouth, New Jersey, last week to deliver several hundredweight of documents, history was in the making.

The other British companies associated with the Parnigan consortium include STC and Marconi. The U.S. army has asked for bids to supply its Five Corps, comprising 25 divisions, with new battlefield communications.

initially planned (after the break down of a collaborative project with Britain in 1970) as a U.S. venture and the technology is certainly there to produce it. But the system actually being produced in the U.S.—known as TRI-Tac (for tri-service tactical communications) is said to be less mobile and more manpower-intensive than either Parnigan or Rita.

industrial lobby could decide to fight it, or, for example, political support for the contest could be undermined if Mr Ambrose or Mr Weinberger were to be moved in the aftermath of the U.S. election.

about 25 per cent of the GTE-Thomson bid may involve the Rita system—the rest could be U.S. components. Plessey suggests though refuses to confirm—that Parnigan may be a higher proportion of the Rockwell-Plessey bid.

Plessey of the UK and Thomson CSF of France, the main European companies concerned, believe this is the biggest telecommunications contract bid they have ever made. Certainly, it seems to be the largest contract opened in foreign competition by the U.S. military—unusually, for such a high technology area, there is no direct U.S. contender for the contract.

Both systems offer enormous improvements on current battlefield communications. They are both fully mobile, area systems, much more secure, much more capable and resistant to damage than their predecessors. Plessey claims that Parnigan, being all-digital and being produced two years later than Rita, is the more flexible and secure. Thomson, however, points to the advantage of Rita's having been more fully tested in the field.

Though it quickly became obvious that the British and French systems were the only real contenders, both are chary of discussing their bids—not surprisingly, since the next stage involves not only tests of the rival equipment by the U.S. army but tough negotiations as the companies refine their bids to "best and final" offers.

Whatever their differences, it is apparent that both European companies have had difficulty conforming to the tender terms. The U.S. army is believed to have asked in its original request for proposals for the quotation of fixed dollar prices up to 1990. It is not clear whether this remains mandatory. All that Mr Clarke will say is that "we have not taken any untoward risks on the financial side."

He told the group, in Peking for an economic symposium, that they should have trust that China's policies would not change and they should not hesitate to take commercial risks in China.

Deng seeks bolder steps from foreign investors

By Mark Baker in Peking

DENG XIAOPING, the Chinese leader, has urged leading Western businessmen to promote investment in China as a means of assisting international economic growth and peace.

U.S. semiconductor makers fear effects of price cut

BY LOUISE KEHOE IN SAN FRANCISCO

U.S. SEMICONDUCTOR manufacturers fear that a recent dramatic cut in the price of memory chips by Micron Technology, of Boise, Idaho, could upset the delicate balance of trade in the \$2.5bn (£2bn) world market for 64k random access memories (rams).

Following trade negotiations between the U.S. and Japan, the Japanese agreed to set up a monitoring system that would enable the U.S. to measure semiconductor trade between the two countries. Unofficially, the Japanese have also become less aggressive in the U.S. market, according to U.S. companies. A booming Japanese market, which has kept Japanese producers occupied with home demand, has contributed to Japanese sales patterns, U.S. producers believe.

China's development, seen from an international political and economic point of view, will benefit world peace and world economic development," Deng said at a weekend meeting with 42 industrialists, economists and bankers from Japan, the U.S., Western Europe and Australia.

Micron, a new company with sales for the past nine months of \$50m, last week told customers that it was reducing its 64k rams prices to \$1.85 on industry standard 200 nanosecond parts and \$1.95 for faster, 150 nanosecond parts. These prices are significantly below prevailing U.S. prices of about \$3 per part.

Now, however, there are signs of softening in 64k ram demand, as the next generation 256k rams become available and the U.S. industry is once more price cutting, they fear. Significant price-cutting in the U.S. market could significantly change the 1985 outlook for the industry, Mr Irwin Federman, president and chief executive officer of Monolithic Memories, warned U.S. companies at the recent Semiconductor Industry Association forecast meeting. The SIA forecast predicts 22 per cent growth in 1985 down from 48 per cent this year. Most of the 1985 growth is, however, expected to occur in the first half of the year.

If and when a contract is awarded late next year, it will be for small initial quantities, though the winning partnership would obviously expect to get the five planned follow-on orders there is not will be no guarantee that it will. Yet the prize is large: Plessey reckons its sales of Parnigan to the British army at £600m-£700m. Twice that sum could now be involved to Plessey—or Thomson.

Other U.S. manufacturers now fear that the Micron Technology price cuts could open the door to similarly low-priced Japanese exports to the U.S. Japanese 64k ram producers are at present following, but not leading, price trends in the U.S. market. U.S. producers believe that the Japanese are being careful not to raise the issue of predatory pricing which could aggravate the protectionist U.S. trade pressures.

Last year, the U.S. semiconductor industry gained significant support in Washington for its complaint that Japanese "targeting" of the U.S. ram market had had a severe impact on the ability of U.S. companies to compete. Japanese manufacturers drove U.S. prices down to unrealistic

So, besides such a deal, even the recent £600m British Aerospace-Rolls-Royce contract to sell Hawke aircraft and engines to the U.S. Navy would pale.

U.S. trade pressures. Last year, the U.S. semiconductor industry gained significant support in Washington for its complaint that Japanese "targeting" of the U.S. ram market had had a severe impact on the ability of U.S. companies to compete. Japanese manufacturers drove U.S. prices down to unrealistic

Australian deal won by ACT

Applied Computer Techniques, the fast growing British computer group, has won a \$65m (£3.3m) order for the Apricot from two New South Wales government departments through its Australian distributor, Barson Computers, Jason Crisp reports.

U.S.-Greek air agreement talks deadlocked

BY ANDRIANA IERODIACONU IN ATHENS

NEGOTIATIONS between the Greek and U.S. Governments for a new civil aviation agreement are deadlocked over a demand by Athens that only one U.S. airline be designated to serve Greece. A 1946 Greek-US civil aviation agreement, which allows Trans World Airlines (TWA) to transport passengers between Greece and the U.S. was denounced as

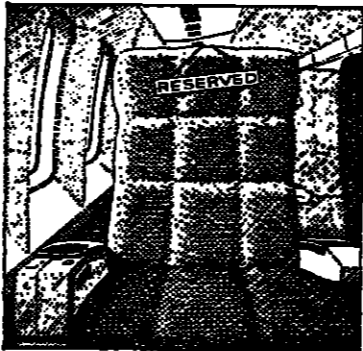
"one sided and colonial" by the Papandreu Government last February. Greece had earlier rejected applications by Air National and Transamerica, both of California to service Athens. A first round of negotiations for a new air pact was cut short in Washington recently, when the two sides failed to agree on the designation issue. The 1946

company supported Washington's negotiating demands, but hoped "the issue would be kept realistic." The spokesman said the Athens destination was "important historically and in profit terms." Athens, on the other hand, sees single designation as vital for ensuring the survival of Olympic Airways, the national carrier.

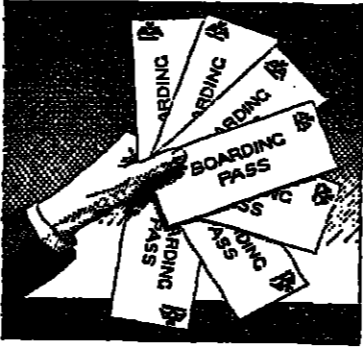
In case you haven't heard the whisper, there's something special in the air. American Airlines.



They can reserve the seat of your choice on any flight to America's South West up to 11 months in advance and hold it until 30 minutes before flight departure.



They also give you all your boarding passes when you first check-in so you won't have to check-in again.



American Airlines Something special in the air

For more information, please contact your local office. Tel: 01-237-8881

Dry cargo rates relapse

BY ANDREW FISHER, SHIPPING CORRESPONDENT

SHIPPING markets remained slack last week, but some brokers claimed to detect signs of a possible uplift in coming months. Even so, the surplus of available tonnage is likely to limit any improvement in rates.

Soviet chartering, the extent of which remains secret, Mr Chesson (Chartering) said that the Russians seemed committed to a record grain import programme in the 1984-85 crop year, which should help the market.

The autumn revival in dry cargo rates, said Denholm, had been followed by a distinct relapse in most areas. "Owners can be little but disappointed by events of the last fortnight."

It also noted that the dollar's rise against other currencies meant many owners earning freight revenues in the U.S. currency were some 15 per cent better off than a year ago.

The rate for grain from the U.S. Gulf to Europe fell to \$5 a ton, not far from the summer low of \$7.75 and well below the April/May level of \$10.50. But there has been some

Some of this increase could be offset by dollar expenses on voyages, "but for many owners the overall effect of being paid in a strong currency has been beneficial."

World Economic Indicators

Table with columns for Country, Trade Statistics, and dates (Aug '84, July '84, June '84, Aug '83). Rows include US \$bn, UK £bn, Japan \$bn, W. Germany DMbn, France Frbn, and Italy Lirebn.

Notice to bondholders Norsk Hydro A/S 9% Bonds due 1991. Notice is hereby given, that pursuant to paragraph 4 (d) of the trust deed US\$2,500,000 principal amount thereof has been purchased by Swiss Bank Corporation, Zurich, as purchase agent during the year of 15th September, 1983, to 14th September, 1984.

Speak french in three weeks. Speak le français in three weeks. Parlez le français in three weeks. Parlez le français en trois semaines. BERLITZ logo and contact information.

Handwritten signature or text at the bottom of the page.

UK NEWS

PRESSURE ON BENN TO STAND IN LABOUR SHADOW CABINET ELECTION

New faces expected in the Kinnock team

BY PETER RIDDELL, POLITICAL EDITOR

CHANGE in the Labour Party's parliamentary leadership now look likely after next month's elections to the Shadow Cabinet.

Mr John Silkin, as present the main spokesman on disarmament, announced at the weekend that he did not intend to seek re-election, while Mr Tony Benn, on the left of the party, who is now eligible after his return to the House of Commons last spring, is expected by his friends to stand for election.

Mr Silkin's decision is no surprise to his fellow Labour MPs since he has not been involved on a day-to-day basis as a Opposition spokesman but has instead, frequently been absent overseas because of his work as president of Parliamentarians for World Order, an international disarmament campaign. He is under considerable threat of failing to gain re-election by his local constituency party, although some MPs believe that he may not stand at the next general election.

Mr Benn has made no formal statement about his plans but both his local party and close allies in the Campaign Group of hard-left MPs want, and expect, him to stand. His chances may be better than when he was defeated in November 1981 and, if he is elected, Mr Neil Kinnock, the party leader, would face an embarrassing decision on the allocation of a portfolio.



Mr John Silkin



Mr Eric Heffer

Otherwise, Mr Eric Heffer's position looks under threat. A number of fellow MPs, including some on the left of the party who voted for him last year, have been critical of his recent behaviour, especially of his performance as chairman of last week's party conference in Blackpool.

Last November, the Centre/Right proved to be more efficient than the Left in concentrating its votes and thus in getting both Mr Barry Jones and Mr Giles Radice elected. They may be under challenge from Mr Jeff Rooker and Mr Donald Davies, while the main centre-right conten-

der will be Mr Donald Dewar, the party's Scottish spokesman. Divisions within Labour about some of the conference decisions were highlighted at the weekend by comments from Mr Denis Healey, the Shadow Foreign Secretary. He described as "ridiculous" the conference vote that the police should not be allowed to play any role in industrial disputes, although he did not think the decision would form part of a future policy statement.

During a BBC Radio Leeds phone-in, he said the number of pickets in the mining dispute should be reduced. "It is wrong that a thousand pickets are needed to

stop one miner trying to go to work. I think it is important that the unions should follow the Trades Union Congress guidelines that pickets should number no more than six and that they should operate simply by peaceful persuasion."

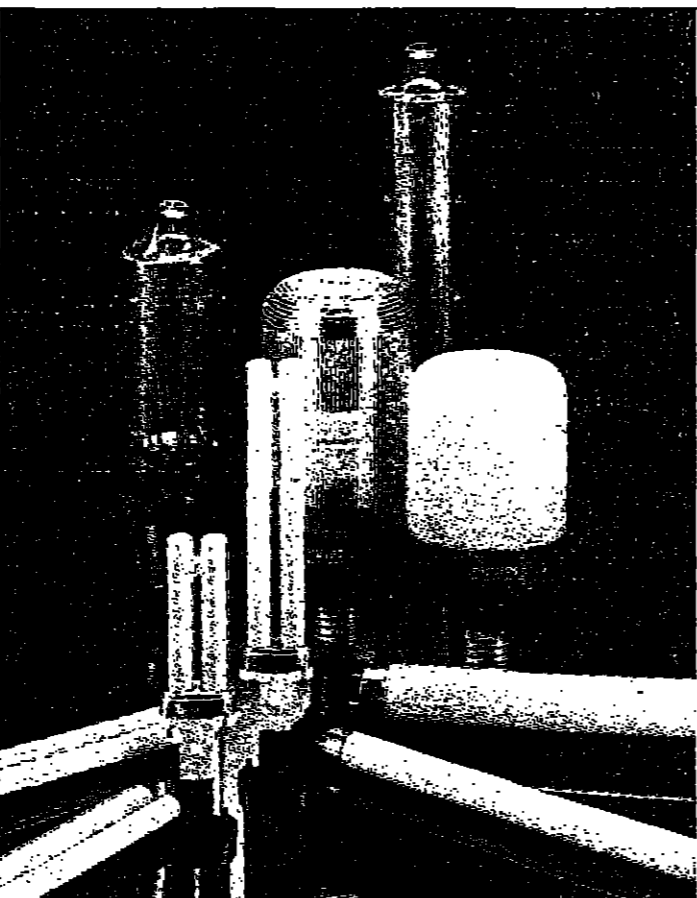
On defence, Mr Healey said he found it difficult to understand why the Labour national executive committee had once proposed a process with a series of steps leading into each other. He emphasised the priority of the cancellation of Trident and the removal of U.S. cruise missiles from Britain, together with a Nato declaration against the first use of nuclear weapons. Then, he said, U.S. nuclear bases would go over a period of time by a process of negotiation.

Mr David Steel, the Liberal leader, commented in a television interview yesterday morning that "the Labour Party is an impossible instrument and unselectable as a Government."

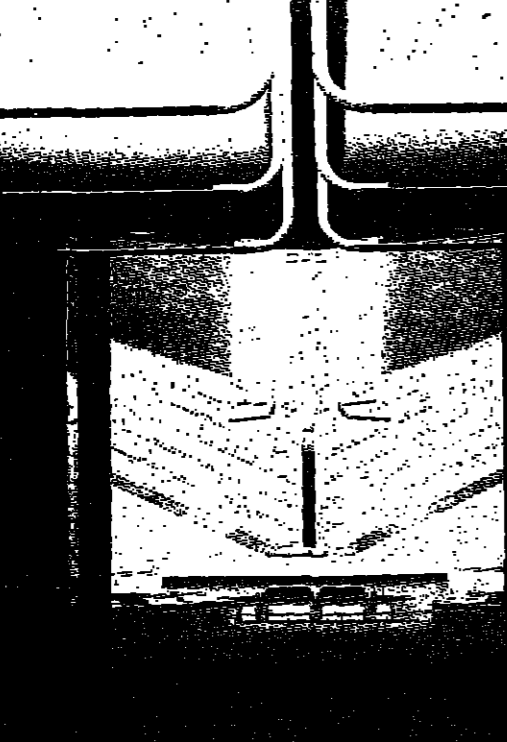
Light is money. Cost-efficient lamps convert paid-for energy into maximum luminosity. Philips are world leaders in cost-efficient lighting. In fact, the Philips SOX low pressure sodium lamp is acknowledged to be the world's most cost-efficient light source, producing no less than 200 lumen per watt. The Philips plug-in SL* lamp produces a comparable light output to a 100 watts conventional incandescent lamp - but uses only 25 watts. That's a saving of 75%. And this lamp has an operating life of 5000 hours or 5 times that of an incandescent lamp.

Other cost-efficient lamps are the Philips compact PL* and the all-purpose TLD 26 mm diameter fluorescent lamp. So Philips have proved, better than anyone else, that light can be cost-efficient.

But can light be aesthetic as well as efficient? The Philips 'Verre Lumière' company, based in France, can create luminaires, or light fittings, to grace any art gallery - and tailor-make them to your taste. Middle East Airlines and the



Light can be beautiful



Hotel Cosmos, Moscow, are among those organisations which have installed Philips stylish 'Verre Lumière' tailor-made lighting incorporating Philips compact cost-efficient lamps. So light can be beautiful... and save money, too.

For more information about Philips lighting, write to us on your business note paper, indicating areas of interest. Philips Philips International B.V. Marketing Services Lighting Division (EC2), 2600 MD, Eindhoven, The Netherlands.

Sure sign of expertise in lighting



Union votes against holding strike ballots

BY PHILIP BASSETT, LABOUR CORRESPONDENT

BRITAIN'S fourth-largest trade union, the National and Local Government Officers' Association (NALGO), has formally decided not to hold ballots of its members before strikes - in direct defiance of the legal measure now in force, requiring this under the Government's Trade Union Act 1984.

The unpublished decision was carried at a special meeting of the union's national executive council last month called specifically to consider the issue.

Meetings at the weekend of executive sub-committees of the union formally carried opposition to other sections of the Act, which is expected to be endorsed at the union's next executive meeting next month. NALGO's stance is likely to worry ministers, since it is traditionally seen as a moderate union, with

many of its 780,000 members active Conservative supporters. This week, the union is holding a special conference to decide whether to halt all further financial contributions to the miners' strike.

Although some unions are reorganising themselves in order to bring themselves into line with the Act, NALGO's stance and its confident arguments to support it will give heart to other unions unsure of how far to push their opposition to the legislation.

NALGO's decision was taken with only one vote against. The executive endorsed a confidential NALGO document on the issue, recommending that the union maintain its "business as usual" policy. A union spokesman said this meant that the union would continue to operate "as we usually do."

FitzGerald optimistic

FINANCIAL TIMES REPORTER

DR GARRET FITZGERALD, the Irish Prime Minister, is optimistic that the British and Irish governments together can make progress in solving Northern Ireland's problems.

Speaking at the end of his party's annual conference, Dr FitzGerald said the two governments, for the first time in 60 years, shared common analysis of the problem and it would be disappointing if, having

got that far, they could not make real progress in negotiations. In a radio interview after the conference, he effectively withdrew last week's protest by the Irish Government over remarks by Mr Douglas Hurd, the Northern Ireland Secretary. Dublin had objected to a passage in a speech Mr Hurd gave to police recruits, but Mr FitzGerald said the protest had probably been hasty and the remark had been taken out of context.

Contracts & Tenders

REPUBLIC OF GABON Libreville Water Supply CALL FOR TENDER

INTERNATIONAL HOTEL DEVELOPMENT IS PROPOSED AT MANCHESTER INTERNATIONAL AIRPORT

REPUBLIQUE ALGERIENNE DEMOCRATIQUE ET POPULAIRE

CONTRACTS AND TENDERS ADVERTISING APPEARS EVERY MONDAY

CANON INC. NOTICE TO BE OBSERVED BY THE SECRETARY OF STATE

Company Notices Public Notices

BUSINESSMAN'S DIARY

- UK TRADE FAIRS AND EXHIBITIONS
October 23-28 London Business Equipment Show
October 26-November 3 International Bike Show
October 12-15 British Designer Show
October 14-16 National Franchise Exhibition
October 16-18 Internecon Conference and Exhibition
October 17-22 British Motor Show
October 22-24 Exhibition of Technology, Equipment and Service Banking Insurance and Finance
OVERSEAS TRADE FAIRS
October 9-13 International Machine Tool Trade Fair-INTERTECH
October 10-16 World Fair of Photography, Photo, Cine, Video, Audiovision
October 10-12 Hong Kong Toy and Gift Fair
October 11-21 International Communications Trade Fair
October 14-22 International Hotel and Catering Equipment Exhibition
October 22-27 International Electrical and
BUSINESS CONFERENCES
October 11 The Royal Institute of International Affairs: Commercial prospects in the Gulf
October 12 Trenton Presentations: Direct marketing conference
October 15-16 FT Conference: Unit Trusts-A major force in international investment
October 15-19 Lloyd's of London Press: Air carriage law and claims handling
October 18 Japan Trade Centre: Factory automation and industrial co-operation
October 18-19 FT Conference: Management Strategy for the Financial Services Revolution
October 22-23 FT Conference: Electronic financial services
October 22-23 Frost and Sullivan: Motivating and managing computer personnel
October 23-26 Macfarlane Conferences: AD Surveys British creativity
October 23-24 Park Lane Hotel, WI Business Research International: London International corporate finance conference
October 23-24 Royal Garden Hotel, W8 Conference Services: Convention of the Bureau International de la Recuperation
October 23-24 Grosvenor House Hotel, WI Institute of Taxation: Tax and financial planning opportunities
October 23-24 Royal Garden Hotel, W8 Europe conference
October 23-24 City Business Conferences: Swap financing
October 23-24 Grosvenor House Hotel, WI November 6 Simon & Coates: Seminar on economics and investment prospects for 1985
October 23-24 FT Conference: The second professional personal computer conference
November 14 Business Briefings: Manufacturing CFD
November 14-15 CFS Conference: Centre, WI

Cal li... is for... drop... amercia... land Si... HIGH

UK NEWS

BCal likely to revise bids for air routes

BY MICHAEL DONNE, AEROSPACE CORRESPONDENT

BRITISH CALEDONIAN Airways (BCal) Britain's largest independent air carrier, intends to move quickly to implement the Government's decision for reshaping the UK civil airline industry.

One of its first steps will be to review the applications it has already made to the Civil Aviation Authority (CAA) to take over some of British Airways' (BA) routes, to see if they can now be turned into bids for dual designation - the right to fly on them in competition with BA.

Last Friday's White Paper (policy document) on Competition in Civil Aviation strongly endorsed the principle of dual designation, while rejecting any direct transfer to the independent airlines of BA's European routes from Gatwick and the regional airports.

Earlier in the summer, when the CAA in its own report reviewing civil aviation policy, recommended such transfers, BCal was quick to apply for the Gatwick routes.

Those included BA's services to Bilbao, Barcelona, Bologna, Gibraltar, Lisbon, Madrid, Malaga, Naples, Oporto and Valencia.

At the same time, BCal put in bids for other BA routes, including Athens, Rome, Düsseldorf, Copenhagen, Oslo, Stockholm, Muscat, Abu Dhabi, Dubai, Singapore and Kuala Lumpur.

It planned to fly them from Gatwick, near London, its airport base, in competition with BA, flying from Heathrow, London, under the dual designation principle.

BCal's task is now to sort out which routes it intends to seek. It cannot now take over BA's routes from Gatwick to Spain and Portugal, but there is nothing to stop it from revising its bids for those routes to include them under dual designation.

It may also pursue, if it wishes, all of its other licence bids for dual designation, in the light of the Government's encouragement.

BCal has longer-term plans for bids for dual designation to such other long-haul destinations as Delhi, Shanghai and Peking. It is also

thinking of using the Saudi Arabian network it is being given (in return for giving up its Latin American routes) as a stepping stone to other South-East Asian, Australasian and Far East destinations.

However, while BCal's long-term ambition under dual designation are boundless, the big difficulty is how far foreign governments will be prepared to go in accepting additional UK airlines on international routes traditionally limited to only one UK operator and one foreign airline.

Many governments have in the past strongly opposed relaxing that rule, fearing a loss of traffic to their own national airlines, and many attempts by the UK to get them to change their minds have failed.

It will be up to the Government to step up its own negotiating pressure on foreign governments in an attempt to translate its support for dual designation into effective route rights that BCal and other independent operators can implement.

'Threat to security' from fleet decline

By Andrew Fisher, Shipping Correspondent

BRITAIN'S economy and defence security are in danger of being seriously weakened by the rapid decline in the country's merchant fleet, the British Maritime League has said in a special report.

It has called on Mrs Margaret Thatcher, the Prime Minister and the Government to make a firm declaration that transport was important to the UK and that shipping was vital.

The league, a pressure group with members drawn from maritime and other industries, as well as politicians, said a merchant fleet is the essential fourth arm of defence in war.

"The current decline is fast approaching the point where the adequacy of the fleet for defence purposes is doubtful in terms of ships and will soon become so in terms of experienced men."

The UK merchant fleet - now just under 24m deadweight tons against the 1975 peak of 50m dwt - also contributed to the balance of payments, helped ensure cargo space for those trading in and out of the country, and gave some control over freight rates. The conclusions of the report, entitled Britain does need a merchant shipping industry, were drawn up after a conference on the industry held by the league this summer.

They included a recommendation that the Government "should do more to co-ordinate policies in various transport sectors."

The league said a forum should be set up, possibly within the National Economic Office, to bring together all parties concerned with maritime and related interests.

Such a forum should analyse the fleet's decline, review the fiscal climate - the industry has accused the Government of being among the least supportive for shipping of any in the world - and study whether free trade really existed in shipping markets.

In a separate study of the reasons for the fleet's decline, which the league has given to the Government, it referred to the large cost differences with other flag nations, notably in the Far East, and the protectionism in many markets.

Stone International's rise from the ruins

Ian Rodger examines the aftermath of receivership

THE RECENT flotation of Stone International on the London stock market was a reminder of one of the most controversial industrial bankruptcies in recent years.

Stone, which is the dominant maker in the world of air-conditioning equipment for railway and metro carriages, was one of the main subsidiaries of Stone-Platt Industries, which collapsed in the spring of 1982. A lively debate followed the collapse on whether receivership was the right move, considering that almost all the group's businesses had survived.

Until 1980, Stone-Platt was a significant manufacturer of textile machinery, pumps, marine propellers and the specialised air-conditioning equipment with turnover in 1978 of £211.5m and 13,000 employees. However, its stability was threatened by the collapse of demand in the late 1970s for textile machinery, its chief product. Unfortunately, at the time, the group's top management was in some disarray and so did not deal with the issue as quickly as needed.

In mid-1980, new management, led by Mr Leslie Pincott, was brought in to try to resolve the group's difficulties. The successful pumps and marine propeller businesses were sold for a total of £18.5m and, in 1981, the group's banks and some investing institutions backed a £10m capital restructuring programme.

However, the losses in the textile equipment division remained very high, and soon the group found itself with inadequate resources to finance the massive rationalisation

required. One plan called for a reduction of employment in textile machinery from 3,000 to 300. More disposals and another financial restructuring were proposed, but the banks, led by the Midland, were not impressed and decided to call in the receivers in March 1982.

The receivership was an extremely successful one. All the remaining businesses were sold and all but one continued to operate successfully.

Stone International was the largest of them, and has recovered remarkably since its assets were bought by some of its former managers with institutional support for just under £15m.

In the 17 months to May, 1982, it had an operating profit of £2.9m on sales of £34.4m. In the year to May, 1984, profits were £7.4m on sales of £72.8m. The stock market flotation valued Stone at £28m, more than double the price paid to the receiver for the assets.

The key to the recovery, according to Robin Tavener, the chief executive, was simply a restoration of hands-on management. When the Stone-Platt crisis began, he was moved from his position as chairman of what was then called the electrical division to become group chief executive.

Inevitably, the textile machinery division's difficulties absorbed nearly all his time. The electrical division lost its way at a crucial time. It had just made two large U.S. acquisitions and strong management was needed to integrate them in the division. Without it, performance plummeted.

"Things were so bad that none of the divisional managers were interested in participating in the management buyout," Mr Tavener says. He was however, confident that he could go back and put the electrical division right, and he has done so. He has replaced the chief executives of all three U.S. subsidiaries and several other key managers.

As for the other former Stone-Platt divisions, they too have done surprisingly well.

Platt Saco Lowell, which makes machines for making textiles out of natural fibres, was sold by the receiver to Hollingsworth of Wharfedale of the U.S. for an estimated £12.5m, and the factories in Lancashire, the U.S. and Spain are still operating.

Ernest Scragg, which makes textile machines which use artificial fibres, was sold to Rieter, a Swiss competitor, for an undisclosed sum. The Oldham plant was closed and production concentrated on Langley, Manchester.

Transfer opportunities were offered to all Oldham staff and 70 per cent took it. Recent recruitment has lifted staff numbers from 320 to 340, compared with the 700 employed at the time of the receivership.

Mr Geoffrey Bucklow, who has been managing Scragg with full autonomy since the purchase, says he is "looking at a very nice order book."

Longlose, the Leeds textile dyeing machinery maker, was acquired from the receiver by its managers with help from the English Association Trust. Mr Trevor Hick, managing director, says the group now employs 135 people compared with 180 two years ago.

There is a "distinct possibility," he says, that Longlose will follow Stone International to the stock market. The one casualty so far is a foundry at Bury, near Manchester, which was sold to Columbia Industries of the U.S. It was closed last April when the expected volume of business did not come in.

Mr Pincott, the chief executive of Stone-Platt when the group collapsed, has argued long and vigorously that the receivership was not necessary. He says that, at the time, the directors had reached agreement to sell Platt Saco Lowell to Hollingsworth. That, with one or two small disposals and a "modest rights issue" would have enabled the group to return to a reasonable financial state within a year.

Under Chapter 11 of U.S. bankruptcy laws, Stone-Platt would have been given the time to implement its recovery plan, but not under receivership as practised in the UK.

Mr Bill Mackey of Ernst and Whinney dismisses those arguments. He points out that the proposed sale of Platt Saco was conditional on Stone-Platt's retaining the creditors and financing heavy redundancies, something the group could not afford to do. "So they had a deal they could not complete."

He also says that the auditors were then preparing their annual report on the group and had to form a view about whether it could operate for another year.

He dismisses criticism of the subsequent success of the subsidiaries. "What people should ask is whether or not Stone-Platt could have survived. No more would have come out under Chapter 11 than out of the receivership."

Ford drops from top of heavy commercial vehicle league

BY KENNETH GOODING, MOTOR INDUSTRY CORRESPONDENT

FORD dropped from first to third place in the heavy commercial vehicle (more than 3 tonnes gross weight) sales league in September, falling behind Leyland, BLS subsidiary, and General Motors' Bedford company.

Ford is still feeling the effects of its incentive campaign, which offered dealers up to £1,500 a vehicle in extra bonuses if they achieved set targets by the end of June. The scheme caused sales to rise but since June Ford's registrations have fallen sharply.

In September its registrations totalled 590, down from 713 in the same month last year, while Leyland's rose from 561 to 632 and those of Bedford from 482 to 577. Bedford now has its own incentive campaign.

It remains difficult to judge the underlying strength of the heavy commercials market in view of the distortions brought about by the Ford incentives. Last month, registrations were virtually the same as September last year, 4,067 against 4,071.

In the first nine months, heavy commercial vehicle sales were up

by 9.3 per cent from 36,958 to 40,402.

That more than accounted for the rise in the overall commercial vehicle market by 1.9 per cent to 210,292, according to the Society of Motor Manufacturers and Traders.

Registrations in September were down 2.1 per cent on the same months of 1983 at 19,935. The importers' market share in September fell from 39.5 per cent to 37.4 per cent but over the nine months rose from 34.4 per cent to 35.8 per cent.

In September light van sales were 6,141 compared with 6,117 a year before.

Harland Simon in French venture

BY LYNTON McLAINE

HARLAND SIMON, the UK electrical drives company, has formed a joint company with Jemmont-Schneider, the French industrial corporation, to market electrical drive systems covering the whole of the industrial spectrum.

The new company, called Jemmont-Schneider Industrial Systems, is owned one-third by Harland Simon and two-thirds by Jemmont-Schneider, one of the largest industrial groups in France, with a turnover of about £980m.

The formation of the company brings together the expertise of Harland Simon in industrial electrical drives for small and medium-scale applications and the work of Jemmont-Schneider in drives for heavier industrial plant.

Harland Simon has specialised in electrical drives for the printing, rubber, paper, plastics, board and other light industries. Jemmont-Schneider has traditionally produced larger electrical drives, among other products, for the chemical and process industries.

The new company will market the drive systems of both the French and UK parent companies in the UK and will give access to the French and European market for Harland Simon

UK promotion plan pledged more funds

BY ANTHONY MORETON

BRITAIN is to put a further £1m into a campaign to attract more overseas companies to set up operations in the UK.

The money, which had to be put into next year's budget despite considerable opposition from the Treasury, will be complemented by capital from the private sector.

Launching the campaign in London Mr Norman Lamont, Minister of State at the Department of Trade and Industry, said industry was about to be approached to support the programme, which will be run by the Invest in Britain Bureau (IBB).

The bureau which exists to co-

ordinate Britain's overseas promotion and attract inward investment, will work in conjunction with Locate in Scotland, Winvest (Wales Investment Location) and the Industrial Development Board for Northern Ireland as well as English regional development organisations.

The bureau has appointed Vainr Polten to handle the campaign, which will be concentrated heavily on the U.S. and Japan as well as some European countries such as West Germany.

Details of the campaign will not be announced for about a month, but it is expected that seminars bringing together potential business entrants to the UK, mail shots and advertising programmes will comprise the main thrust.

The £1m allocated - which is in addition to IBB's existing budget of £300,000 - is not a large sum for that sort of promotion. Only this week Benetton, the Italian clothing company, announced that it was spending £1.7m in the coming year in the U.S. alone.

Mr Lamont said there had "never been a better time to invest in Britain and there has never been a better time to send out the message to the international business world that Britain means business."

"We shall be targeting not just on companies which have invested here but on those which know the UK, particularly banks and financial institutions in the U.S. The main thrust, though, will be towards existing companies which want to invest in Europe."

Britain had an "unrivalled opportunity" over the next two years, he thought, to increase the flow of successful inward investment projects.

Last year 236 projects of which 57 per cent came from the U.S., had arrived in Britain, a record since the IBB was set up in 1977. They had created over 15,000 new jobs and safeguarded more than 18,000 others.

CHANGES TO TELEPHONE CHARGES

British Telecommunications plc announces the following changes to telephone charges. These are the first changes for main telephone services (other than international calls) since November 1983. Overall, the changes on exchange-line rentals and on local and national (formerly known as trunk) calls are within the limit set by the BT Licence.

FROM NOVEMBER 1st 1984.
Exchange line and standard telephone rental.
Residential.

Exclusive rental increased by £1.00 to £15.15 per quarter.
Shared rental increased by 95p to £14.10 per quarter.
Rebate on rental for low use residential lines increased from 3.0p to 3.2p per unused unit below 120 call units per quarter.

Business.
Exclusive rental increased by £1.50 to £23.50 per quarter.
Shared rental increased by £1.45 to £22.45 per quarter.

FROM NOVEMBER 5th 1984.
Charges for calls from ordinary lines.
Call unit charge increased by 0.3p to 4.7p.
20-25% more time for peak and standard rate national (formerly trunk) calls over 56 kms will make these calls cheaper on average.

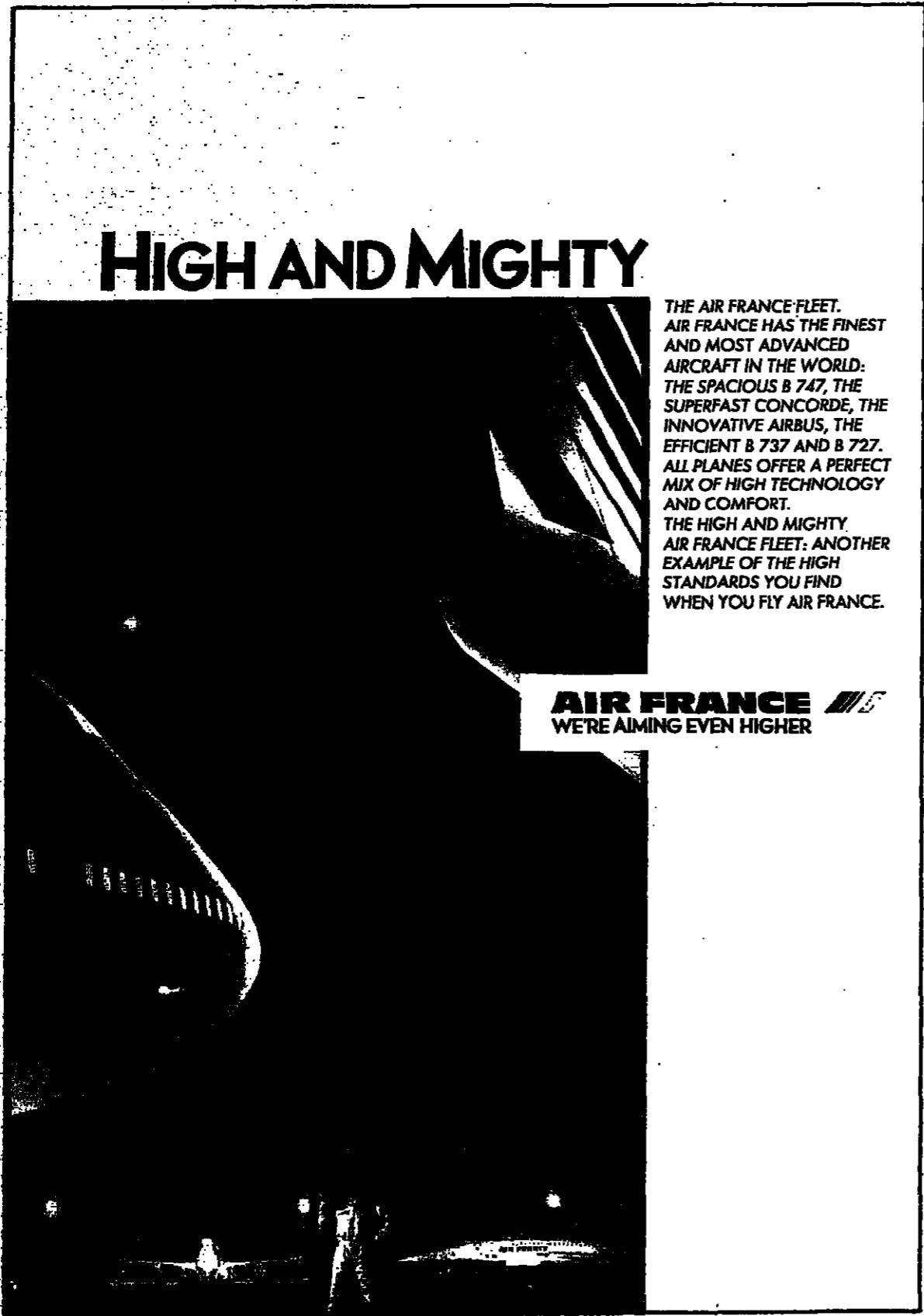
Charges for calls from payphones.
The minimum charge for all calls from payphones will be increased to 10p, but more time will be allowed for this minimum charge on most national (formerly trunk) and international calls.

Other items.
Changes are being made to charges for national (formerly trunk) and local operator controlled calls, and to charges for some telephone instruments, extensions, and apparatus.

VAT.
Quoted charges, except those for payphones, are exclusive of VAT.


ADDITIONAL INFORMATION.
Details of all changes will be notified to customers with their quarterly bill in November, December or January. For further information about these changes please dial 100 during normal office hours and ask for Freefone 2500, or for Freefone BTI for enquiries about international services.

British TELECOM
Registered Office 81 Newgate Street, London EC1A 7AJ
Registered in England no 1800000



HIGH AND MIGHTY

THE AIR FRANCE FLEET. AIR FRANCE HAS THE FINEST AND MOST ADVANCED AIRCRAFT IN THE WORLD: THE SPACIOUS B 747, THE SUPERFAST CONCORDE, THE INNOVATIVE AIRBUS, THE EFFICIENT B 737 AND B 727. ALL PLANES OFFER A PERFECT MIX OF HIGH TECHNOLOGY AND COMFORT. THE HIGH AND MIGHTY AIR FRANCE FLEET: ANOTHER EXAMPLE OF THE HIGH STANDARDS YOU FIND WHEN YOU FLY AIR FRANCE.

AIR FRANCE 
WE'RE AIMING EVEN HIGHER

TECHNOLOGY

EDITED BY ALAN CANE

PRODUCTIVITY TOOLS IN THE COMPUTER INDUSTRY

Better software by numbers

BY ALAN CANE

TO SOBER data processing professionals, Larry Putnam must come over as the reincarnation of a quack doctor from a travelling medicine show.

Not personally, mind, for he is a model of quiet integrity but what he is promising must seem to them about as credible as the claims the hucksters made for their large bottles of patent medicine.

Indeed, if it were not for commendations from a number of prestigious organisations including the UK Ministry of Defence and Marconi Radar Systems, many people would find it hard to take Mr Putnam's claims seriously.

He is used to the incredulity; now he has the data to back up his theories.

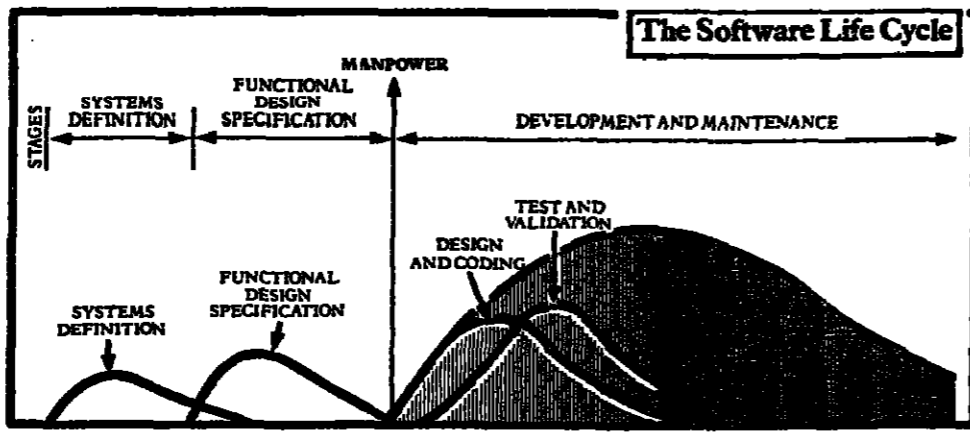
Mr Putnam is a software engineer, a specialist in ways of creating better software more productively. What he is offering is something most software people believe is impossible; a way of measuring and predicting software productivity.

A way, in fact, of putting sensible engineering numbers to a process which is still regarded as a black art. His software tool, SLIM, is used to predict the cost of software projects and their likely delivery dates.

The stuff of dreams, the experts might say, aware of research results showing that in the UK two-thirds of all software projects over run their budget and more than half take longer to complete than planned.

The problem was placed in stark relief by Dr John Taylor, a Ministry of Defence scientist at a conference earlier this year.

He argued that within a decade the amount of software deployed in battle systems



would rise between 1,000 and 10,000 times. "The value and cost of ownership of this software and database will go up by very much more, particularly as the people involved in producing and maintaining all this get more scarce and expensive."

That is why software engineering has been identified as one of the key "enabling" technologies and why companies are setting up special software engineering units to tackle the problem of the management of software production.

Software engineering tools are of many kinds, from simple screen editors to elaborate computer based management systems.

Mr Putnam's method originated in observations he made back in 1974 while an advisor on software budgets to the Department of Defence in the U.S.

He noted that people could simply not put numbers to software development. Without numbers, it was impossible for

management effectively to manage software projects.

First by rule of thumb, then by careful analysis of hundreds of real software projects, Mr Putnam developed a set of equations to describe any kind of software development. The key was the similarity between the staffing profile common to all software projects and profiles developed by Peter Norden of IBM for teams of engineers developing hardware.

Mr Putnam's equations apply to projects where teams of three or more people are involved in developments which last at least six months. Now he has packaged the whole system so it can be run on a personal computer.

The analysis gives engineering explanations of some phenomena in software development that have been known empirically for a long time. For example, Mr Putnam's equations can be used to explain why adding more people to a software team on a project which is already over time does not

speed up completion but in fact slows it down.

And it explains why it is disastrous to attempt to complete a piece of software in less than a specific time.

Mr Putnam's acronym SLIM stands for Software Life Cycle Management model and it is now used extensively by the U.S. Defence Department.

According to Mr Jim Green of the UK consultancy PACTEL which is sponsoring SLIM in this country: "The reasons given by the DoD for adopting SLIM relate to its need to equip procurement staff with effective management decision aids... it states that its chief reason is the ability to save large amounts of money that SLIM provides."

Mr Putnam promises large savings in time and money. According to Mr Frank Zachert, vice president responsible for information systems at GTE Data Services of Tampa, Florida, nothing in software development is done without using SLIM.

U.S. AIRLINES SIGN UP FOR SELF SERVICE FLIGHT BOOKING

NCR launches card operated ticket machines

NCR, WHICH two years ago announced prototypes of a card-operated self-service ticketing machine, now has over 100 units installed at U.S. airports and says it is about to sign contracts with two unnamed European airlines.

The production model, NCR 1810, does everything that an ordinary booking terminal in an airline office can do, but the procedures have been simplified for operation by the general public.

The machine will accept any magnetically encoded card to American Banking Association

or International Standards Organisation format, and is connected over phone lines to the airline's central reservation system. In addition, positive credit checking can be performed on line with the card company's computer, and the holder's account debited.

The user inserts his card and then answers simple questions which appear on the cathode ray tube display, asking him where he wants to go and when. He selects choices from those displayed, and the tickets including a boarding pass if

appropriate, are delivered from slots.

No personal identification number is used—it is supposed that fraudulent acquisition of travel tickets will not be criminally attractive.

Mr Al Booth, NCR's U.S.-based director for these systems, says that one American airline deploying the 1810 increased its market share at a particular airport by 1,000 passengers a month. He claims that public acceptance of the machines has "exceeded our expectations."

Mr Booth is convinced that applications will be extended. Since the machine is essentially one which accepts a card, makes checks, offers choices, debits accounts and issues documents, he sees no reason why a traveller should not use the machine to check into and out of the hotel itself. At the same time the 1810 would be able to ask the user about his further flying, car rental or train travelling, and make his arrangements for him. It is, he says, only a matter of programming.

MID GLAMORGAN'S INDUSTRIAL REGISTER ON VIEWDATA

Practical information on INDIS

INDIS, a computerised industrial information system launched by Mid Glamorgan County Council six years ago, is in the process of embracing the telecommunications revolution.

Its unique Register of Industrial Capacity, designed to attract more business to companies in south and west Wales by setting out their capabilities and current capacity to take on orders, has just been adapted for dissemination via Viewdata systems. The scene has also been set for Indis subscribers to update information about their own companies on the database via their own Viewdata terminal, and for the whole system to be plugged into the Prestel network.

The Capacity Register identifies, in detail, the products, processes, services or components manufacturing capabilities of local companies wishing to publicise that they have spare operating capacity. Participants pay £40 a year to be on the register.

Up till now, the main means of dissemination has been in the form of a booklet, printed out quarterly from the computer, which has been sent to some 6,000 manufacturing companies. These are mostly in Wales and along the M4/M5 corridor, but the Capacity Register also goes to international companies based in neighbouring Ireland, the

200 UK manufacturers and various EEC business information services.

But by adapting the register for dissemination via Viewdata systems, Indis hopes in practice to reach an even bigger audience for its service, either directly or via Prestel. Preliminary discussions have already opened with the Prestel authorities with the aim of providing what would be a wholly new service for its 600,000 subscribers.

The Viewdata system has also been so designed that participating companies can subscribe to up to 26 additional "pages" to provide further information which they think could be useful in winning additional custom; for example, price quotations, more detailed technical specifications and even advertisements with response frames.

For the time being, Indis staff will continue to load information onto the database. But it is eventually planned that subscribing companies will be able to access their own pages and change or update their own information via their own terminals.

Indis began as an initiative by Mid Glamorgan to strengthen the county's industrial base, by promoting a greater degree of local economic integration. It emerged during preparation of an industrial directory for the county in the mid-1970s that

only one company in three in the county was buying its goods and services locally.

The upshot was that the county council enlisted the support of the Manpower Services Commission, the Welsh Development Agency and the Polytechnic of Wales to build up a computerised business information system of practical day-to-day use to the business community.

Besides the Capacity Register, Indis also produces a regular Guides to Incentives and Services, a Product Register, and a Register of Product Users.

Mr Peter Davies, Indis' manager, reckons that some 10 per cent more business is now being generated locally thanks to the information base Indis has created for encouraging a switch in local industrial purchases to local suppliers.

Another measure of Indis' success is that three more Welsh counties — South and West Glamorgan, and Dyfed — have decided to participate. The database is now in the process of being expanded to take in the businesses within their county boundaries. There has also been a recent suggestion that the Welsh Development Agency should explore the possibility of financing Indis' expansion to cover the whole of Wales, again as an economy-strengthening measure.

ROBIN REEVES

GRIFFITHS LABORATORIES SPEND £1m ON OVEL PROCESS

Secret recipe for breadcrumbs

BRITONS consume 20,000 tonnes of breadcrumbs a year. Griffiths Laboratories, a Canadian company which is one of the world's largest breadcrumb makers, is spending £1m on a factory to manufacture a new kind of breadcrumb in the UK.

The factory in Somercoates in Derbyshire, ready by the middle of next year, will make a Japanese-type breadcrumb which has become very successful in the U.S. Food manufacturers, faced with a static food market, have been seeking ways of making their food products more appealing and found that a Japanese process produced an attractive coating. Not only did the products look better but they could be baked in the oven instead of fried and the coating was smoother than the conventional bird seed-like covering found on fish fingers, for example.

Food companies found that the coating was ideal for poultry, either chilled or frozen, so opening up a new market for breadcrumb makers.

The problem with the manufacturing process was that it took 15 hours and nine separate stages to create a batch of breadcrumbs. The quality of the result could not be guaranteed because the process was subject to variations in the yeast and various process temperatures.

Griffiths Laboratories' Panko process cuts the time down to only 90 minutes with five stages and the breadcrumbs are produced on a continuous basis with constant results. Though reluctant to reveal the precise details of the process Mr Graham Whittle, Griffiths' sales and marketing director, said that the process is based on a continuous extrusion of a par-

tially cooked crumb. The technique combines the baking and staling (where the yeast is prevented from further growth) stages in a continuous flow of dough through the factory.

Mr Whittle waxes lyrical on the outcome of the process saying that the crumb has "a delicate, splinter-like structure, making it crispier and lighter. Its splinters consists of a honeycomb of baked bread dough, and air, the honeycomb retaining all after the flash frying process."

The £200m turnover company introduced U.S.-made breadcrumbs using its process four years ago and sales in the UK have risen to 5,000 tonnes a year. This has been additional growth in the breadcrumb industry without affecting the traditional crumb and has gone to provide coatings for poultry products.

ELAINE WILLIAMS

"100 years in quality building"

Tom Green 01-346 7133 0277-354141

Semiconductors Evaluating designs

SEMICONDUCTOR chips, especially those of novel design, have to be evaluated before they can be designed into new circuits.

Harris Microwave Semiconductor has therefore introduced two designer evaluation kits for the high-speed gallium arsenide integrated circuits now on the market.

One is for use with 32-pin medium-scale products, the other a 16-pin tester for use with small-scale integration devices.

The kits provide all the hardware and printed circuit board connections to demonstrate working gigahertz systems. Priced at £359 and £335 respectively the kits are expected to be most useful to designers working on telecommunications, fibre optic, instrumentation, high-speed computers and military systems. More on 0734 636787.

Computers Thinking systems

TEXAS Instruments, the major U.S. electronics manufacturer, is launching a computer to build "thinking" systems.

Called "Explorer system," and priced at \$82,000 upwards, the computer is derived from technology licensed from Lisp Machine Corporation and the Massachusetts Institute of Technology.

It will be an advanced symbolic computer for the development and delivery of applications based on artificial intelligence. Explorer uses the LISP programming language and includes a high performance processor optimised for symbolic processing. Enquiries are planned to start in April, 1985.

1715 carats



Cordon Bleu by Martell



The supreme cognac since 1765

Before you take off on business, make sure you've got everything.

Make sure you've got express check-in, a luggage allowance of 30 kilos and special lounge facilities.

Make sure you've got a seat where you want to sit. (Upstairs if you don't smoke, downstairs if you do.)

And while you're selecting your seat, make sure you've got the widest Business Class seat in the air.

Make sure it's got a generous recline and you've got the comfort of extra leg room.

Make sure you've got a choice of menus, and that the food is served on elegant china with fine cutlery and table linen.

Make sure you've got French wine and champagne from Moët and Chandon. (Don't forget the cheese board and fruit basket.)

Make sure you've got a comprehensive selection of business reading material.

Make sure you've got an electronic headset and a pair of comfort socks.

Make sure you've got someone to fuss over you. (Only an airline with one cabin attendant for every ten passengers can make

sure you've got that.)

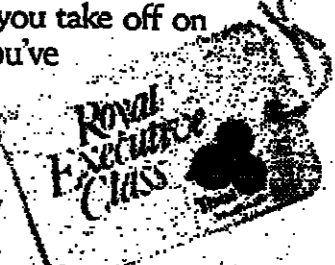
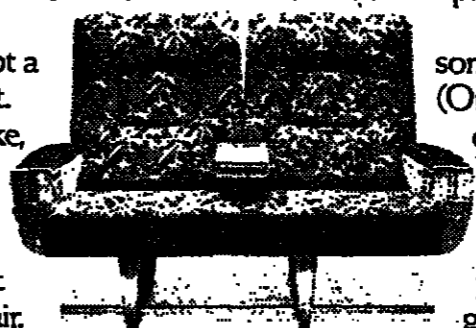
And make sure you've got an airline whose route network can take you to 40 different destinations



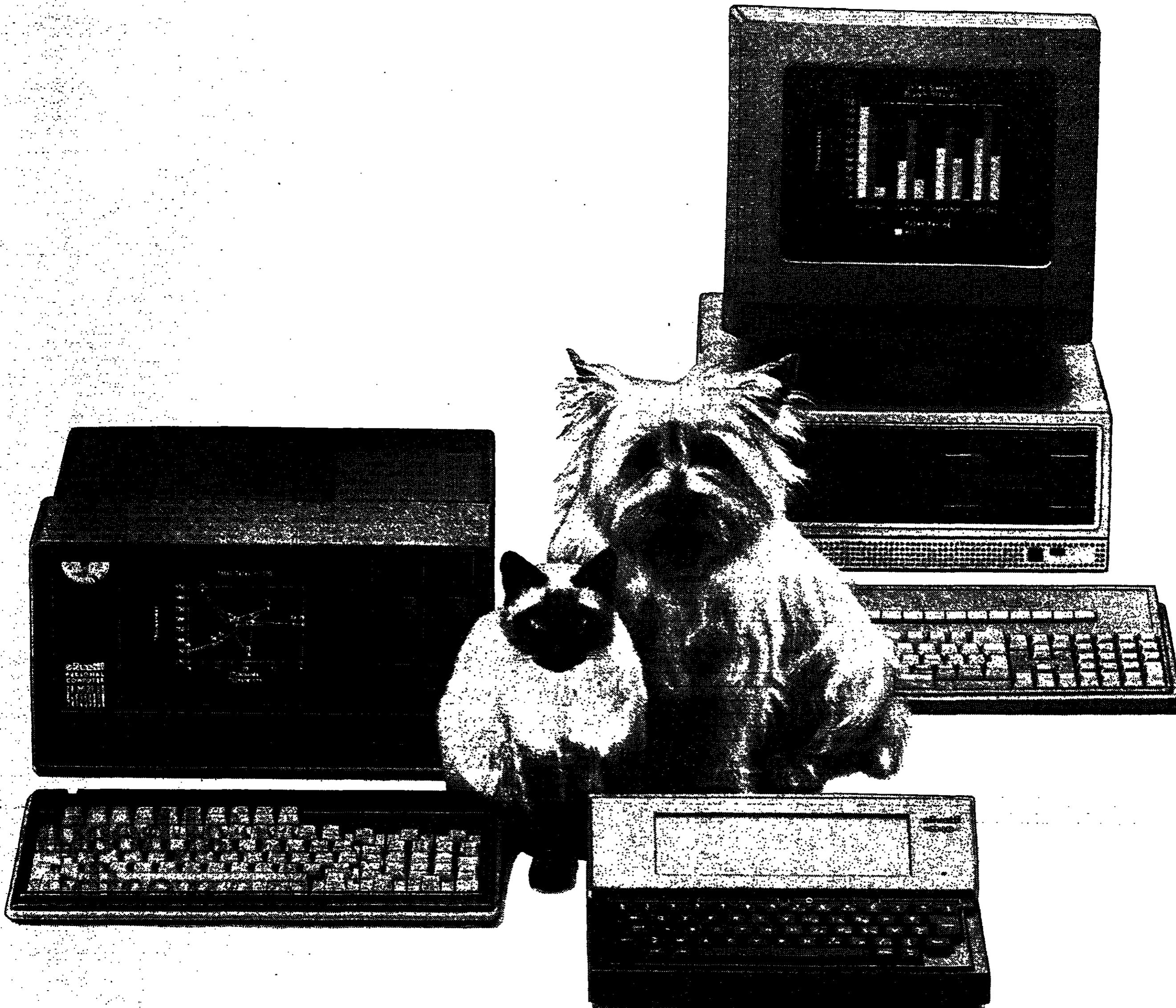
across four continents.

In short, before you take off on business, make sure you've got a ticket flying Royal Executive Class on Thai.

And you'll know you've got everything.



Thai Smooth as silk.



BUSINESSMEN FEEL MORE AT HOME WITH THE NEW OLIVETTI FAMILY OF PERSONAL COMPUTERS.

When Olivetti came to develop a new range of business computers they had one very special advantage over other manufacturers.

An understanding of how businesses run.

Everyday Olivetti talk to 30,000 businesses of all types and sizes all over Europe.

And the years of experience of working practices and problems they've gained in the process has helped them produce a range of computers any businessman will feel at home with.

For a start there's the M24 desk top computer which is operationally compatible with the industry standard.

This fact alone gives you access to the widest range of software on the market today including all the most popular packages.

The M24 also offers a high resolution screen with 16 colours or shades of grey and has a superb modular format designed for greater expandability.

Both the M24 and the M20 are powerful 16 bit computers and they can be upgraded, as your business grows, into a fully integrated network.

And because they have inbuilt communications facilities both the M20 and the M24 can be linked to other office machines to take your business into full office automation.

Finally there are two Olivetti portables, the M21 and the M10.

The M21 is a true 16 bit transportable with all the power, information storage capacity and presentation capabilities of today's most advanced personal computers.

While the M10 is so compact that it easily fits into a briefcase and can be fully operational wherever you are.

They're all backed by the service and support network of Olivetti, the leading European data processing company.

And they're all part of the first family of personal computers you'll feel at home with.

If you'd like to find out more, fill out the coupon below.

To Valerie Belfer, British Olivetti, Olivetti House, 86-88 Upper Richmond Road, Putney, London SW15. Tel: 01-785 6666. Please supply me with details on the new Olivetti range of personal computers.

NAME	POSITION
COMPANY	
ADDRESS	
TEL. NO.	olivetti

- | | | | |
|------------------------------------|--|---------------------------------|----------------------------------|
| Thornton Baker
AYLESBURY | Thornton Baker
EASTBOURNE | Thornton Baker
KENDAL | Thornton Baker
NEWCASTLE |
| Thornton Baker
BANSBURY | Thornton Baker
EDINBURGH | Thornton Baker
KETERING | Thornton Baker
NORTHAMPTON |
| Thornton Baker
BATH | Thornton Baker
EVESHAM | Thornton Baker
LANCASTER | Thornton Baker
NOTTINGHAM |
| Thornton Baker
BEDFORD | Thornton Baker
FLEETWOOD | Thornton Baker
LEEDS | Thornton Baker
NUNEATON |
| Thornton Baker
BIRMINGHAM | Thornton Baker
GALASHIELS | Thornton Baker
LEICESTER | Thornton Baker
OXFORD |
| Thornton Baker
BOURNEMOUTH | Thornton Baker
GLASGOW | Thornton Baker
LIVERPOOL | Thornton Baker
PETERSFIELD |
| Thornton Baker
BRADFORD | <div> <p>Thornton Baker.
Nobody gets closer to clients.</p> </div> | | |
| Thornton Baker
BRIGHTON | | | |
| Thornton Baker
BRISTOL | | | |
| Thornton Baker
BURY ST. EDMUNDS | | | |
| Thornton Baker
CARDIFF | | | |
| Thornton Baker
CHICHESTER | | | |
| Thornton Baker
CHIPPING NORTON | | | |
| Thornton Baker
CLECHHEATON | | | |
| Thornton Baker
CLYDEBANK | | | |
| Thornton Baker
CORBY | | | |
| Thornton Baker
COVENTRY | Thornton Baker
HEXHAM | Thornton Baker
LONDON | Thornton Baker
SOUTHAMPTON |
| Thornton Baker
CRAWLEY | Thornton Baker
HIGH WYCOMBE | Thornton Baker
LUTON | Thornton Baker
WARRINGTON |
| | Thornton Baker
HINCKLEY | Thornton Baker
MANCHESTER | Thornton Baker
WELLINGBOROUGH |
| | Thornton Baker
IPSWICH | Thornton Baker
MILTON KEYNES | Thornton Baker
WITNEY |
| | Thornton Baker
ISLE OF WIGHT | Thornton Baker
MORCAMBE | Thornton Baker
WORTHING |

With over 60 offices around the country, wherever you are, we are never far away.

The fact is, being close to our clients is good for their business.

It means we have more in-depth knowledge of the local environment which enables us to offer more considered advice to local businesses.

It increases our familiarity with both individuals and their business needs. And, quite simply, makes keeping in touch that much easier.

Because direct involvement has no substitute, at Thornton Baker our structure guarantees that every office has principals that are partners.

Their involvement is an essential part of our service. The high ratio of partners to staff enables complex problems to be dealt with by senior people and ensures every client has access to expert opinion on the spot.

At the same time we always have the flexibility to call on support from our national resources.

Every Thornton Baker office can offer you traditional financial guidance or general business advice whether you're

an individual or responsible for running a business.

Return the coupon for more information or if you have a specific enquiry please telephone your local office. The sooner you do, the closer we'll get.

TO: Dept. TB, Gladstone House, 20-24, Lonsdale Road, London NW6 6RD.

Please send me details of the full range of Thornton Baker's services.


Name (Mr/Mrs/Ms) _____

Job Title _____

Company _____

Address _____ FT/8/10

Postcode _____ Tel _____

Thornton Baker 

CHARTERED ACCOUNTANTS

A member of Grant Thornton International.

THE WEEK IN THE COURTS

The law on public accountability

PUBLIC administration as something apart from and above the law may appeal not only to ministers but also to bureaucrats invoking the parrot of "yes, minister" and "no, judge." But the accountability of public organisations and institutions to private individuals, associations and companies is no longer merely a matter for slogans and discussion in political circles.

It has become an ever increasingly prominent and established feature of the legal landscape.

Historians in the future are likely to record the florescence of public law as one of the most notable developments in the English legal system during the 1970s and 1980s. An outstanding example of this recent tendency occurred at the beginning of this month when Mr Justice Mann delivered a reserved judgment in *Bargain SA and Others v Ministry of Agriculture, Fisheries and Food*.

In his judgement he made rulings on a preliminary issue arising in litigation between various French companies on the one side and the ministry on the other which resulted from a ministerial decision allegedly harming those companies.

On September 1, 1981, the ministry revoked a general licence authorising the importation into the United Kingdom of French turkeys and turkey parts. A decision of the European Court of Justice in Luxembourg invalidated this ministerial act by ruling that in revoking the licence the ministry had contravened its obligations under Article 30 of the Treaty of Rome, an article prohibiting quantitative restrictions on imports.

The French companies brought proceedings in England claiming damages against the ministry. The basis of their claims was threefold: breach of statutory duty; commission of an innominate tort; and misfeasance in public office.

The preliminary issue constituted an attempt by the ministry to nip the proceedings in the bud by asserting that the companies' claims disclosed no cause of action known to English law.

Mr Justice Mann's decision brought the ministry little consolation. He ruled that the claim for damages in respect of an innominate tort was obsolete and therefore disclosed no cause of action, but that the companies' statement of claim disclosed a cause of action for breach of statutory duty and misfeasance in public office.

The impact of Europe on England is manifest in his judgment. He followed two decisions of the European Court of Justice. In one, *NV Algemene Transport- en Expeditie Onderneming van Gend and Loos v Nederlandse Administratie der Belastingen* the individual was entitled to sue European Community officials in a national court for protection against breach of an article in the EEC Treaty if that particular article created individual rights which national courts must protect.

In the other, *Inelli and Volpi SPA v Ditta Paolo Meroni*, the European Court decided that Article 30 created such individual rights.

The ministry's argument was that a claim for damages was not an appropriate form of protection for an individual who alleged an infringement of his rights under that article. The only available and appropriate remedy was an application for judicial review by way of declaration, not proceedings for damages. According to the ministry, this was an adequate way of enforcing whatever rights the companies had.

Mr Justice Mann disagreed. A declaration gave insufficient protection because an English court could not grant an interim declaration to preserve the status quo or to safeguard the French companies against any loss or damage caused or occurring between the date the proceedings began and the date of judgment at the trial.

Furthermore, the duty of the English court was not to decide what remedy would achieve the object of Article 30, but to decide and apply whatever remedy would effectively protect any right conferred by the article and would effectively deter any breaches.

Mr Justice Mann saw no reason in principle why a person who alleged a breach of duty in contravention of Article 30 could not start whatever proceedings he thought appropriate, whether by way of a claim for damages or by way of an application for judicial review. In his opinion, both types of proceedings were available. He rejected the application of any narrow doctrine of "exclusivity" or "either/or" in this context.

However enlightened this may be as an approach to the problems of litigation, it remains to be seen whether the Court of Appeal or the House of Lords will concur with this aspect of Mr Justice Mann's judgment, whether as an expression of legal principle or as a correct application of any previous binding decision.

In support of his ruling that the French companies were entitled to continue proceedings for damages for breach of statutory duty in respect of the alleged contravention of Article 30, Mr Justice Mann cited a House of Lords case in which a contravention of Article 86 was held to give rise to a cause of action for breach of statutory duty. *Gordon Cottage Foods Ltd v With Marketing Board*. He rejected an attempt on behalf of the ministry to distinguish the legal effect of a contravention of the two different articles.

Because the French companies' statement of claim disclosed a cause of action for breach of statutory duty, the claim based on an innominate tort was obsolete, and in this respect the statement of claim disclosed no cause of action.

The phrase "innominate tort" offends the canons of euphony and lucidity, but there may be situations in which the needs of justice can be met in no other satisfactory way. The law should not hinge on labels.

The ministry disputed the legal sufficiency of the allegations of misfeasance in public office because no allegation was made that in revoking the licence the ministry intended to

cause the French companies any harm.

The allegations of misfeasance against the ministry were as follows. In revoking the licence the minister's purpose had been to protect English producers against French competition. When he revoked the licence he knew that this involved a breach of obligations under Article 30. At the same time, he knew that the revocation of the licence was calculated to harm the French companies' licence was conferred on him by the relevant legislation.

It was argued for the ministry that those alleged facts were not sufficient to constitute misfeasance in public office. Past cases showed that misfeasance in public office was committed when the relevant conduct was motivated by malice. But that was not the sole criterion. Mr Justice Mann relied on the Privy Council case of *Dunlop v Woollahra Municipal Council* as indicating that knowledge of the invalidity of the relevant conduct was an alternative element to malice in the proof of the tort of misfeasance in public office.

There was, according to Mr Justice Mann, no sensible distinction between the case where a public officer performed an act beyond his legal power with the object of harming a particular person and the case where he performed an act which he knew to be beyond his power with the object of benefiting one particular person or group of persons but which had the foreseeable and actual result of harming another particular person or group of persons.

It remains to be seen whether the tort of misfeasance in public office will loom large in forthcoming litigation arising from acts in the administrative arena.

* *FTL* October 4, 1984.
† Case 26/82 1983 ECR I, 13.
‡ Case 74/6 1977 ECR 557, 575.
§ 1984 LAC 130, 141, 144.
¶ 1982 AC 158, 172.

Justinian

Appeal over breath tester threatens legal chaos

DRINK-DRIVING law chaos is threatened if the High Court decides this week to uphold a London stipendiary magistrate's ruling that the Intoximeter 3000 breath-test was introduced illegally.

Tomorrow Lord Lane, Lord Chief Justice, will be asked to say, in an appeal case brought by Scotland Yard, whether a former Home Secretary, Mr William Whitelaw, exceeded his powers when he approved use of the device just more than a year ago.

About 83,000 motorists have been convicted on drinking and driving charges after electronic print-outs of breath-alcohol levels from the device proved positive.

All could appeal against conviction, causing administrative chaos in the legal system, if it is found the Secretary of State acted unlawfully.

The issue follows the recent decision at Wells Street Court, London, by Ms Audrey Jennings, a stipendiary magistrate, to dismiss a case of failing to provide a breath specimen brought by police against Miss Maureen Harrigan, 20,

The commercial heating system with a weather eye on your energy costs.

If you are responsible for your office or shop heating, there are two things you ought to know about Britain's weather.

The first is that it's more predictable than we think, with a cold night usually being followed by a cold day, mild night by a mild day, and so on.

The second is that Anticipatory

Charge Control for electric storage heating will let you capitalise on this predictability and thus keep your energy costs down.

It can be your 'weather eye', ensuring that your heaters take on the correct charge during the night-time off-peak period. The Anticipatory Charge Control monitors the temperature overnight and determines in advance what proportion of the full charge is needed. Then it regulates the input to the heaters so that they are ready to meet the heating demands of the following day.

Inside-Outside

The Anticipatory Charge Control uses temperature sensors located either outside the building or within the room to be heated; some internal sensors are integral with the heater itself.

They are not difficult to install and they can readily be fitted to existing storage heating installations.

It is often beneficial to have both types installed, and they can also be used

in conjunction with time controls to give you a day omission facility with frost protection.

A brighter outlook with electricity. Apart from their heat-controlling capabilities, electric storage heaters are good-looking, too.

With new thermal blocks and more

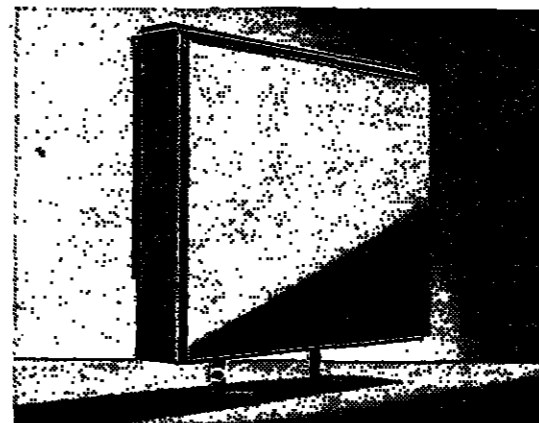
compact insulation - Microtherm, instead of mineral wool - you'll find them slimmer than ever before.

Some are even less than 6" in depth.

Modern electric storage heaters offer you a brighter outlook with greater comfort

and better economy. To cap it all they have a long and reliable life with minimum maintenance.

In the energy-conscious '80s the climate is just right for electric storage heating. Talk to us now on Freefone Build-Electric or clip the coupon.



Please send me more information on energy-efficient electric heating. Post to: Electricity Publications, PO Box 2, Feltham, Middlesex TW14 0TG.

Name _____
Position _____
Company/Address _____

Post Code _____ Tel _____

HEATELECTRIC
The Electricity Council, England and Wales. C1505

DC Dimplex
Crede
UNIDARE

What's s
Danish
They are
FINANCIAL

APPOINTMENTS

Two join board of British Steel

The Industry Secretary has appointed to the board of the BRITISH STEEL CORPORATION Mr Martin Llewarch as full-time member of the corporation in addition to his present duties as managing director, finance officer, and Mr Alan Wheatley as a part-time member. Mr Wheatley is a senior partner of Price Waterhouse and deputy chairman of Cable and Wireless.

CHIVERS Our business has been building since 1884. 21 Eccourt Street, Devon, Wiltshire SN10 1LL. Tel: 038 221. Telex: 44930

BUILDING CONTRACTS Over £8m spread of work for Fairclough Building

FAIRCLOUGH BUILDING has secured a £1.5m contract from St Martin's Property Investments to construct the Cottons sub-structure as part of phase one of the London Bridge City development stretching between London Bridge and Tower Bridge. Work has started. Fairclough has also started a £1m-plus programme of repairs, modernisation and remediation in 61 flats in Chamberlain House on the Ossulton Estate in the London Borough of Camden. The contract, for completion in 1985, includes installation of a passenger lift and the renewal of all mechanical and electrical services. The client is the Greater London Council.

Taylor Woodrow busy at home and overseas

TAYLOR WOODROW MANAGEMENT AND ENGINEERING, Hayes, has won a design and management contract from Pirelli General for a £7m production unit for the manufacture of optical fibres. Programmed to commence production by June 1985, the unit will occupy about 2,000 sq metres comprising a refurbished area of the existing Bishopstoke factory and a purpose-designed building of some 1,000 sq metres.

Norwest Holst wins orders for pipework and construction

NORWEST HOLST plant construction and pipework services companies have begun work on BPA contract for alterations at 54 locations to a 12 inch pipeline running between Killingholme and Ravcliffe, in North East Gas awarded contracts for laying about 4 km of 450mm and 200mm pipeline at Worsley near Manchester. The first of the 200mm pipeline is laid through peat and there are two crossings of major water courses. The section of 450mm pipeline includes a short bore 65 metres long under a M62 motorway. The second contract is to lay 2.2 km of 300mm diameter ductile iron main for the Tydiesley-Worsley connection.

Four orders for Willett

WILLETT has four contracts in London, the South and South West. The first is a £2m contract at Burlington Road, New Malden where Willett is to carry out a £1.5m design and build contract for Trafalgar Brookmount. The second is a £2m contract for a three-story, four-bay two-storey office building and factory unit, to be occupied by Bradbury Wilkinson. Work is due for completion in June next year. ISB is to carry out part of the West Cross Centre on the Great West Road and has asked Willett to fit out the offices and carry out external works. At Sarum Hill in Basingstoke, a £500,000 office development is to be carried out on behalf of Investors in Industry. Work is to be completed in just under a year. At Wharf, Littleton-upon-Severn near Thornby in Avon Willett is to provide research laboratories for Artec Development Estates, valued at over £300,000 and taking 35 weeks to complete. Willett is part of Troilope and Colls Holdings, a Trafalgar House company.

Four orders for Willett

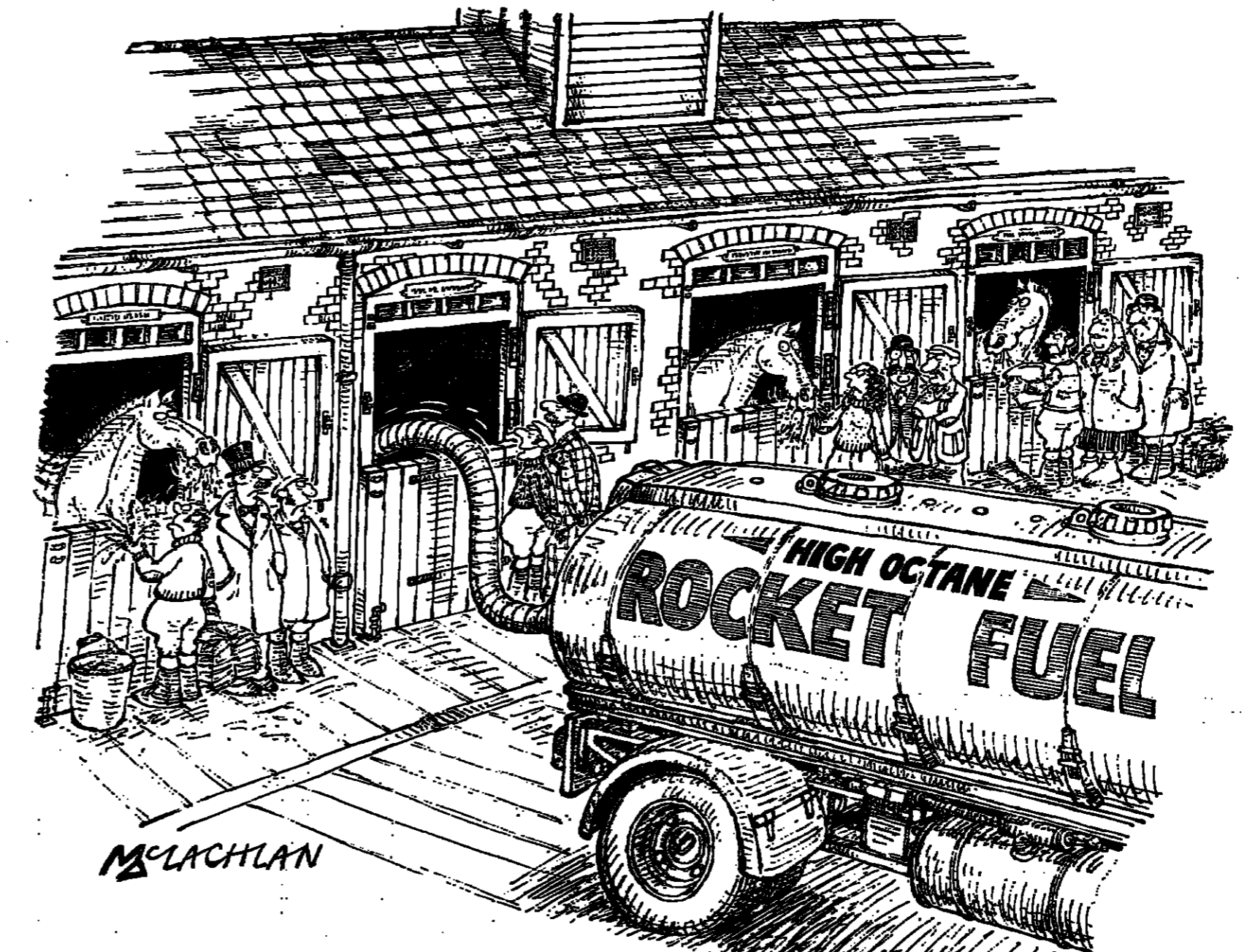
WILLETTE & COLLS (CITY) has secured £4.5m worth of refurbishment contracts. These include fitting out the ground and part of the third floor of the 19th-century group offices in Peachchurch Street; refurbishment of offices for the Swiss Volksbank in Moorgate; refurbishment of six lifts for Lloyds Bank, Lombard Street, completed by October, 1985. Work has started on a £4m City Bank refurbishment. The building in Gresham Street, is to be stripped to provide office accommodation and general banking facilities. The project will be completed within one year. Troilope & Colls (City) members of the Trafalgar House Group.

John Willmott (Bedford)

JOHN WILLMOTT (BEDFORD) is to carry out extensions to Bedford School. In a two-phase contract, work in the region of £200,000. Willmott will construct a workshop extension, alter the existing woodwork and machine rooms, and renovate other teaching rooms. Willmott is also building an £820,000 primary school to serve Milton Keynes. Situated at Bradwell Common, the school will provide 430 places for children aged between five and 12 for Buckinghamshire County Council. The 17-month contract is due for completion by the end of 1985.

Housing Association

Housing Association (£585,000); residential and commercial development at Hatherton Road, Walsall in association with Caldermore Area Housing Association comprising of Day Centre for the visually handicapped and 28 one bedroomed flats (£589,000); and modernisation of 84 homes at Burton Crescent, Wolverhampton for Wolverhampton Metropolitan Borough Council (£283,000).



LET US FUEL YOUR IDEAS AND YOU WILL BE FIRST PAST THE POST

Don't let our name mislead you. While we're closely involved with many leading companies trading between Britain and Scandinavia, we are a U.K. bank. In fact, we're a major source of finance and investment funds for British companies in the U.K. and internationally. Scandinavian Bank is one of Britain's top twenty banks with assets well in excess of £2½ billion and offices in fourteen financial centres worldwide. We are totally committed to customer service and this helps to explain our rapid growth since 1969. We believe in working alongside our customers to create innovative financial packages to meet their particular needs. So, if you're looking for a special service in trade finance, leasing, foreign exchange or any other area of U.K. or international business, contact us. You'll soon discover that with us fuelling your ideas you'll be first past the post.

Service so good it puts you in the lead. Scandinavian Bank Limited, 2-6 Cannon Street, London EC4M 6XJ. Tel: 01-236 6090. Customer Services Manager: Extension 346. Telex: 889093. International Offices: Bahrain, Bermuda, Geneva, Hong Kong, Los Angeles, Madrid, Melbourne, Milan, Monaco, New York, Sao Paulo, Singapore, Sydney, Tokyo, Zurich.

What's special about these Danish companies?

Aalborg, American Express Bank AS, Andelsbanken, Andelskassen a.m.b.a., Bank of America, Baltica-Nordic RE, Betsco & Benzon, Burmeister & Wain Skibsværkt AS, Burmeister & Wain Scandinavian Contractor AS, Borensinformation AS, Carlsberg Breweries, Carlsberg N.A., C & G Bank AS, The Chase Manhattan Bank N.A., Copenhagen, AS Chemiska, Christian Rovsing International AS, Christiani & Nielsen AS, Citibank, N.A., Codan Forsikring, Control Data AS, Danish Steel Works Ltd., Denmark Sparveselskab, Dansk Olie & Naturgas AS, Den Danske Bank, Den Danske Provinsbank AS, DFDS AS, De Forenede Bryggerier AS, Finansforbundet for Industri og Håndværk, AS H. Foss Electric, Foss Kalk, Grøntorv Societet, Gutsenberghus, Copenhagen Handelsbanken AS, AS Hellesø, J. C. Hougaard's Skibshave-Fabrik AS, H. Hoffmann & Søner AS, Jyske Bank, Kemp & Lauritzen AS, Kongelige Koncerthuset AS, The Bank of Copenhagen, Københavns Fondsbørs/Copenhagen Stock Exchange, Larsen & Nielsen Constructor Holding AS, LK-RES AS, Messias Du Nord, McKinsey & Co., Inc., Monberg & Thorsen AS, Nord-Lindberg AS, Northern Furthest International Ltd., Olivetti AS, Pedersen & Højbak AS, Bank Xerox AS, AS Thomas Th. Sobro & Co., Sedaoin & Holmbak AS, Siemens & Wochlert AS, Sparveselskab S.D.S., Storm AS, Superfos AS, Topyshing, Toyota Denmark, Tønder Brevstus.

They are all regular readers of the FINANCIAL TIMES • European Edition

For further information about subscription rates in Scandinavia, please contact Mr. Ejvind Pedersen in Copenhagen:

01-13 44 41

Major insurance brokers propose to cover their walls with Breakmate

Having already invested in our famous drinks dispensers, (thereby ensuring benefits all round) numerous top brokers are now taking out extra cover. In the form of six elegantly-framed prints of the Coffee Houses of Old Europe. This superb collection can grace your wall, too. Whether or not you're a Breakmate client. And absolutely free of obligation. If you're interested, just mail the coupon.

BREAKMATE THE CUP WINNERS. Breakmate Ltd, 28 Concord Road, London W3 0TH. Tel: 01-993 2371. Name: Position: Company: Address: Tel: FT

THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ

Castrol

A market-led revival

Ian Hargreaves reports on the UK oil company's strategy

DIAL SWINDON 80151 and a voice answers: "Burmah-Castrol." This is odd since, strictly speaking, Burmah-Castrol does not exist. Burmah-Castrol UK is merely one of 200 subsidiary operating companies of the Burmah Oil group whose telephone number is Swindon 30151. Burmah's other interests include Hakrota bicycle shops, Rawlplug wall fixings and Quinton Hazell motor components.

At Burmah's parkland headquarters, many other symbols of Castrol's pre-eminence in the group's affairs strike the visitor. Above the main entrance the flag that flies — one blue and red of Burmah, a second, Castrol's green and white. There are two executive dining rooms — the Carrill Room, named after the Scottish millionaire who in 1886 founded Britain's oldest oil company, and the Wakefield Room, in memory of the former Lord Mayor of London who diversified from railway oils to motor oils and in 1909 invented the brand name Castrol.

There is good reason for Castrol's special status. Last year, along with a small petrol retailing business, it contributed 88 per cent of Burmah's operating profits. The year before, the figure was 89 per cent. Burmah is one of the very few oil companies in the world which makes more money downstream than it does from its upstream production of crude oil.

In the decade since Burmah's financial crash, Castrol's cash has done more than anything to impart a sense of security and continuity in the group's affairs. But the very solidity of the image has concealed the stagnation of Castrol's profitability and the fact that the company has been undergoing radical change.

According to Lawrence Urquhart, the ex-Shell man who switched from being Burmah's finance director to the chief executive's job at Castrol in 1982, Castrol's problem was lack of direction.

"The company worldwide was going nowhere. There was almost a recognition that it was yesterday's business, operating in mature sectors. The exploitation of existing markets and products was the name of the game. Diversification and

strategic expenditure were not the name of the game. Castrol was on a gentle decline to becoming a cash cow." The evidence for this analysis, although hardly the biggest worry on the minds of Burmah shareholders, was evident in the results. Operating profits of the lubricants and fuels division of Burmah were £51.2m in 1981, £49.1m in 1982 and £49.2m in 1983.

This plateau was caused partly by the decline in Castrol's markets following the 1979 oil crisis. Demand for motor lubricants in the developed countries fell by between 20 and 30 per cent between 1979 and 1983. The market has since resumed a trend of very slow growth, linked to a rise in the



Liquid Engineering

Castrol's long-running campaign on British TV vehicle population but is still held back by an underlying move towards longer engine maintenance intervals.

Industrial markets—Castrol also makes oils used in processes such as rolling steel and lubricating cutting tools—have also been reduced by recession, although again there has been some recovery this year.

For a long-established company, set in its ways, and the child of a financially strapped parent, these are tough conditions in which to pursue major policy changes. But somehow, in what sounds like a somewhat haphazard fashion in the early days, Castrol has indeed shifted direction.

The new strategy is based, essentially, upon two discoveries made in the late 1970s: that although Castrol's

market share had peaked in some countries, such as the UK and Malaysia, where it stands at around 30 per cent, there was plenty of room for growth in other, potentially very large, markets such as the U.S. and Japan. On the industrial side, Castrol possessed both the technology and the marketing skills to discover new product niches and to spread more effectively the knowledge gained in one country and market niche throughout the group.

The first major application of these ideas, or perhaps the place where Castrol discovered the first element in its strategy, was the U.S.—a country Castrol had entered in search of supplies of oil at the time of the first oil crisis. In 1978 Castrol recruited what its executives still refer to as a "Procter & Gamble type team" to launch itself as a producer of premium-price oils, led by the famous (elsewhere) Castrol GTX brand.

The approach was indeed pure Procter and Gamble: careful research, testing of both product and message in small sections of the market, before moving on to larger areas; and eventually, from last year, a national campaign—the bulk of it conducted through intensive TV advertising.

The initial advertising pitch was rough, tough, direct product comparison stuff, directed at the two market leaders—Fennell and Quaker State. But beneath the barbs lay a careful theme: that Castrol is the right oil for high-revving engines of the smaller cars which by 1979 were sweeping the American auto market.

Today, Castrol claims 7 per cent of the U.S. market. "We still cannot tell where the top is," says Neville Farebrother, the Australian who now directs Castrol's western hemisphere operations. The aim, he says, is to take Castrol to number three in the market, ahead of Valvoline and Texaco, by 1989. Buoyed by this success, Castrol decided to use the same approach in Japan, where in the early 1970s an initial bid to bypass the Japanese trading houses and sell direct into small car dealer and forecourt network had failed.

The Japanese market is different from the U.S. in that half of it is held by the so-called "genuine oils" of the

car manufacturers, whereas in the U.S. 70 per cent of motor oil is sold through chain stores. But the remaining 30 per cent of the Japanese market—specialist auto accessory shops, general merchandisers and imported car dealers—offered opportunities.

Market research established that Castrol was best known in Japan among younger people with an awareness of motor sports. The decision was made to go for the specialist shops, again backed by heavy TV advertising and ousting outwards from small target areas or the country.

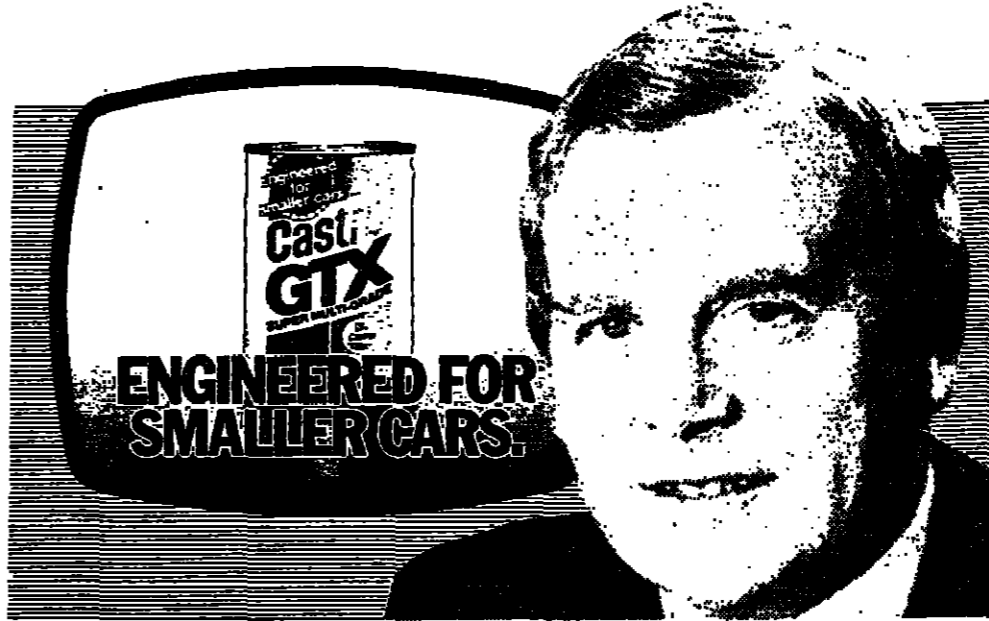
Since its launch in 1982, Castrol has picked up 1 per cent of the motor oil market and thinks it may be able to reach a per cent. The operation is already breaking even. Looking back, says Mike Dearren, who joined Castrol's central marketing and planning division in 1980, after spells with SA and P&A Management Consultants, Castrol and got its feet under its new system—international approach to marketing. Market information seemed to be a compaction of the specialist's reports.

Looking back, says Mike Dearren, who joined Castrol's central marketing and planning division in 1980, after spells with SA and P&A Management Consultants, Castrol and got its feet under its new system—international approach to marketing. Market information seemed to be a compaction of the specialist's reports.

Consulta discovered a formula for a soluble oil widely used in the metalworking industries, which, unlike similar products, did not sustain smelly, unhygienic bacteria when warmed up. This product, Synflo-R, bought in 1981 along with Consulta, is now in use in car plants all over Europe.

This approach of "edging out" into new product areas is likely to feature in the U.S. strategy in the next few years, as well as in markets in South America, Europe and the Pacific Basin. One move already under way is to set up a company in South Korea. This will be the first time Castrol has tried to open up a new market using industrial oils, rather than its traditional motor oils.

Urquhart's contribution since joining Castrol seems to have been to identify these similar approaches in Europe, the U.S. and Japan and to formulate them into a corporate strategy. Remarkable though it may seem, Castrol's business, which the



Lawrence Urquhart, Castrol's chief executive, with the advertising slogan which has helped the company pick up 7 per cent of the U.S. motor oil market within six years

accounts for about 60 per cent of turnover, is industrial products, which present an entirely different marketing problem.

Here, says Dearren, Castrol has identified an approach based upon solving customer problems. That means having the salesman on the doorstep, backed up by strong technical advice, at exactly the right moment.

A favourite Castrol success story in this area is Consulta Chemie, a tiny, highly specialised German oil company which is one of five acquisitions made by Castrol in Europe in the last four years.

Consulta discovered a formula for a soluble oil widely used in the metalworking industries, which, unlike similar products, did not sustain smelly, unhygienic bacteria when warmed up. This product, Synflo-R, bought in 1981 along with Consulta, is now in use in car plants all over Europe.

This approach of "edging out" into new product areas is likely to feature in the U.S. strategy in the next few years, as well as in markets in South America, Europe and the Pacific Basin. One move already under way is to set up a company in South Korea. This will be the first time Castrol has tried to open up a new market using industrial oils, rather than its traditional motor oils.

Urquhart's contribution since joining Castrol seems to have been to identify these similar approaches in Europe, the U.S. and Japan and to formulate them into a corporate strategy. Remarkable though it may seem, Castrol's business, which the

plans completed last year at Castrol HQ were the first such documents in Castrol's recent history.

The effect, say Castrol executives, has been to banish memories of the period in the 1960s and 1970s when an ambitious Burmah tried to run Castrol's international operations through the parent company's own foreign offices, which had the effect of fragmenting Castrol.

Across the world, Castrol does also run head on against the major oil companies, whose products are every bit as good as Castrol's and whose resources are beyond Burmah's dreams.

According to Mike Dearren, the industrial lubricants market is too finely structured and specialised for the slow-footed oil majors, who tend, he says, to use their lubricant divisions as a rung on the management career ladder and so lack both the commitment and the craftiness born of experience of a company like Castrol.

In the motor oil business, although the majors are strong and in some countries unshakable on the petrol station forecourt, they have not so far been successful in the retail store market. That, like attacking the industrial oils market, would require a degree of marketing finesse which thus far they have not displayed, as well as a willingness to allow general merchandisers to compete with their own petrol stations.

That may not be likely, but if the recent history of Castrol demonstrates one thing it is that old dogs are not beyond new tricks.

There must also, however, be some risk that as Castrol seeks growth in stagnant markets the competition will strike back. That would mean different things in different markets—there are 700 companies in the automotive oil business in the U.S., whereas in other countries, the market is dominated by a handful of players.

Across the world, Castrol does also run head on against the major oil companies, whose products are every bit as good as Castrol's and whose resources are beyond Burmah's dreams.

According to Mike Dearren, the industrial lubricants market is too finely structured and specialised for the slow-footed oil majors, who tend, he says, to use their lubricant divisions as a rung on the management career ladder and so lack both the commitment and the craftiness born of experience of a company like Castrol.

In the motor oil business, although the majors are strong and in some countries unshakable on the petrol station forecourt, they have not so far been successful in the retail store market. That, like attacking the industrial oils market, would require a degree of marketing finesse which thus far they have not displayed, as well as a willingness to allow general merchandisers to compete with their own petrol stations.

That may not be likely, but if the recent history of Castrol demonstrates one thing it is that old dogs are not beyond new tricks.

Backing for designers in industry

AS THE latest phase in its campaign to promote the use of design in industry, the British government is backing a drive to persuade more companies to offer work experience to advanced design students.

A six-week series of promotional meetings in seven cities, under the theme "Design by Experience," is now under way. Meetings still to be held will be in London, Newcastle, Leeds, Cardiff and Birmingham.

Launching the initiative, which has been organised and financed by the Business and Technicians Education Council, Peter Brooke MP, the Junior Education Minister, appealed to employers to take several design students each for up to six weeks a year. There would be a three-way benefit, he argued: to industry, to the students themselves, and indirectly, to the quality and relevance of design education.

One of the recurrent complaints from companies about design graduates has been that they tend to be ill-prepared for work in industry; not only that they are often ignorant of commercial and managerial realities, but that they are reluctant to work to tight specifications. On the other hand, many design colleges have claimed that companies simply do not know how to use a well-trained designer.

Though there was a grain of truth on both sides, the gap between them had been narrowed in the last few years, said Roger Hampson, principal of the Loughborough College of Art and Design. But the relationship was still in need of improvement.

The government's backing of this campaign comes hard on the heels of a doubling to £20m of its budget for the design advisory service funded consultancy scheme, which allows companies to use design consultants free of charge for a limited period. It is also discussing assistance to the Royal Society of Arts to launch an industrial placement scheme for 200 top design graduates.

*BTEC, Central House, Upper Woburn Place, London WC1E 6JH. Tel 01-388 3255.

Christopher Lorenz

When Fortune Magazine chose the ten best made products in the world, this was one of them.



After all, it does take 150 operations to build, check and approve just one Cross pen. Available in finishes from satin black to hallmarked silver, and rolled gold to 18 karat gold, Cross pens begin at around £7. They accept engravings, and can carry logos and emblems in up to six colours. Find out more by clipping the coupon.

AT Cross (UK) Ltd, Concorde House, Concorde Street, Luton, Beds., LU2 0JD. Tel: 0582-422793. Please send me full details of the Cross range of writing instruments, and the Cross business gifts service.

NAME _____ POSITION _____

COMPANY _____

ADDRESS _____

CROSS SINCE 1848

BASE LENDING RATES

A.B.N. Bank	10 1/2%	Hill Samuel	10 1/2%
Allied Irish	10 1/2%	C. Hoare & Co.	10 1/2%
Amro Bank	10 1/2%	Hongkong & Shanghai	10 1/2%
Henry Ansbacher	10 1/2%	Kingsnorth Trust Ltd.	10 1/2%
Armaco Trust Ltd.	11%	Knowledge & Co. Ltd.	10 1/2%
Associates Cap. Corp.	10 1/2%	Kroyer's Bank	10 1/2%
Banco de Bilbao	10 1/2%	Mallinball Limited	10 1/2%
Bank Hapoalim	10 1/2%	Edward Manson & Co.	11%
BCCI	10 1/2%	Meghray and Sons Ltd.	10 1/2%
Bank of Ireland	10 1/2%	Trust Bank	10 1/2%
Bank of Cyprus	10 1/2%	Morgan Grenfell	10 1/2%
Bank of India	10 1/2%	National Bk. of Kuwait	10 1/2%
Bank of Scotland	10 1/2%	National Girobank	10 1/2%
Banque Paribas	10 1/2%	National Westminster	10 1/2%
Barclays Bank	10 1/2%	Norwich Gen. Inc.	10 1/2%
Beneficial Trust Ltd.	10 1/2%	People's Tel. & Sv. Ltd.	12%
Brit. Bank East	10 1/2%	R. Raphael & Sons	10 1/2%
Brown Shipley	10 1/2%	P. S. Refson & Co.	10 1/2%
CL Bank Nederland	10 1/2%	Roxburgh & Co.	11 1/2%
Canada Ferman's Trust	10 1/2%	Royal Bk. of Scotland	10 1/2%
Cayser Ltd.	10 1/2%	Trust Co. Canada	10 1/2%
Charterhouse Japhet	10 1/2%	J. Henry Schroder Waggs	10 1/2%
Choulatons	11%	Standard Chartered	10 1/2%
Citibank NA	10 1/2%	Trade Dev. Bank	10 1/2%
Citibank Savings	11 1/2%	TCB	10 1/2%
Civdesbank	10 1/2%	Trustee Savings Bank	10 1/2%
C.M. Coates & Co. Ltd.	11 1/2%	United Bank of Kuwait	10 1/2%
Com. Bk. N. East	10 1/2%	United Mizrahi Bank	10 1/2%
Consolidated Credits	10 1/2%	Volkswagen Limited	10 1/2%
Co-operative Bank	10 1/2%	Westpac Banking Corp.	10 1/2%
The Cyprus Popular Bank	10 1/2%	Whiteaway Ltd	11%
Dunbar & Co. Ltd.	10 1/2%	Williams & Glyn's	10 1/2%
Duncan Lawrie	10 1/2%	Witntrust Secs. Ltd.	10 1/2%
E. T. Trust	11%	Yorkshire Bank	10 1/2%
Eastern Trust	11 1/2%		
First Nat. Secs. Ltd.	12%		
Robert Fleming & Co.	10 1/2%		
Robert Fraser	11%		
Grindlays Bank	10 1/2%		
Guinness Mahon	10 1/2%		
Hambros Bank	10 1/2%		
Hertable & Gen. Trust	10 1/2%		

One of Redditch's most successful small big bigger factory units.

All Bob Talbot wanted when we first met him was 4,000 square feet to expand. What we gave him was that - and more. An undertaking that whenever he wanted more space we'd find it - without penalties, delays or long term commitments.

If you'd like to know more phone Jayne Gannon on Redditch (0527) 64200. With offices and factories from 500 square feet to 50,000 we'll help you in any way we can. Short of giving you the next site reserved for Bob Talbot.

Post to: Bernard Ryan, Property Director, Redditch Development Corporation, Hollmwood, Plymouth Road North, Redditch, Worcestershire, Telex: Redlaw G. 335201. Please arrange for me to have: a video presentation on Redditch FT21 (format required) a fact file a visit to Redditch

Name _____ Position _____

Company _____

Address _____

Postcode _____ Telephone _____

Aren't you ready for Redditch?

CONSULT MERCHANT SYSTEMS FIRST

FOR MICROCOMPUTER SOLUTIONS THAT LAST

MERCHANT SYSTEMS 01-583 6774

Chris Grant is your contact

MERCHANT SYSTEMS LTD, LONDON E.C.4

N.A.V. at 28.9.84 US\$46.31

VIKING RESOURCES INTERNATIONAL N.V.

INFO Pireos Holding & Pireos N.V., Herengracht 214, Amsterdam

Korea Exchange Bank

U.S. \$30,000,000 Floating Rate Notes Due 1988

In accordance with the provisions of the Notes, notice is hereby given that the rate of interest for the period 5th October, 1984 to 9th April, 1985 has been fixed at 12% per cent per annum and that the coupon amount payable on Coupon No 7 will be U.S. \$62.00

Agent Bank

البنك السعودي الدولي المحدود

Saudi International Bank AL-BANK AL-SAUDI AL-ALAMI LIMITED

FT EUROPEAN TOP 500 SURVEY

REPRINTS OF A SERIES OF ARTICLES ARE NOW AVAILABLE FROM:

Nicola Bankham Publicity Department Financial Times Braeken House 10 Cannon Street London EC4P 4BY Price £2.50

CENTRAL BANK OF NIGERIA FLOATING RATE NOTES DUE 1986/90 TO BE ISSUED IN RESPECT OF OUTSTANDING TRADE DEBT

DANSK OLJE & NATURGAS A/S GUARANTEED FLOATING RATE NOTES DUE APRIL 1989

Brasilver S.A. Net asset value as of 1st Octo... 1,022,187 per Cr\$ Share: U.S.\$6,430.95 per Depository Share: U.S.\$6,639.65 (Second Series) U.S.\$6,639.65 per Depository Share: U.S.\$5,139.51 (Third Series) U.S.\$5,139.51 per Depository Share: U.S.\$4,801.29 (Fourth Series)

U.S. \$25,000,000 BANCA SERFIN, S.A. Floating Rate Capital Notes Due 1986

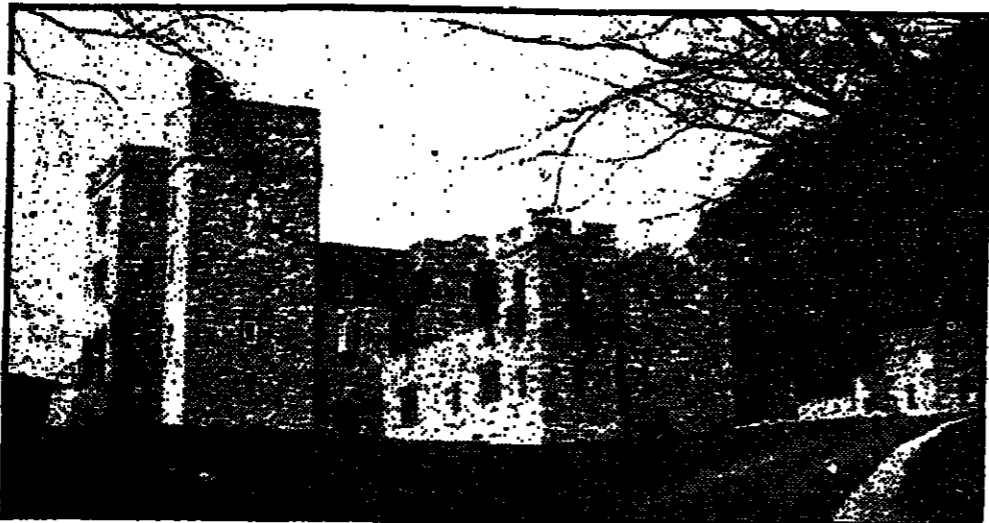
For the six month interest period from 5th October, 1984 to 9th April, 1985, the Notes will carry an interest Rate of 12% p.a. and the Coupon Amount per U.S. \$1,000 will be U.S. \$62.00.

Credit Suisse First Boston Limited Agent Bank

THE ARTS

Architecture
Colin Amery

Mods and Baroque



A new house for a modern architect: Castle Gyrn by John Taylor

There can be no doubt that the country house has become a growth industry. There is a large gang of scribes plotting every move of the owners and the house itself. There is even something called "English Country House style" an invention of decorators and photographers which can now be found in drawing rooms in Islington and the showrooms of Sloane Street. What had not been noticed until recently is the fact that since the Second World War the actual industry of building new country houses has continued apace. If you accept the definition of a country house as the centre of an estate of at least 1,000 acres, and usually much more, the growth of the industry may seem surprising.

John Martin Robinson in his new book, The Latest Country Houses, (Bodley Head, £15.00) has uncovered the whole architectural sub-strata of the nation. At least 200 houses have been built or altered in a major way since the last war by architects working in the Neo Georgian style. It would have been fascinating to put a figure on the cost of all this building activity; there is no doubt it represents a major expenditure by landowners.

national architecture as an almost futuristic activity. This is only because the professional journals and some architectural critics have always concentrated on Modern Movement architecture and the mere sight of a classical column has been enough to terrify them.

It is a sad reflection on the vast profession of architects that so few are able to design a good house and that so many of them are seduced by the trends of the transatlantic magazines. The modern style is seldom ideal for the English countryside on any large scale, a fact that the new builders seem to have accepted.

Bloody Poetry/Leicester Haymarket
Michael Coveney

Fire and water, explosions and squalls, these are recurring elements in Shelley's life and art. At the end of Howard Brenton's new play, Byron attends the cremation on the Viareggio beach. He delivers an oration: "Burn him. Burn us all. A great big bloody rage. These are the virtues celebrated in this extraordinary dream play which begins, as it ends, on a foreign shore."

This playfulness with legend is reflected in Poppy Mitchell's set of blue, watery vistas contained in three large blue receding proscenium frames (an idea first used by Philip Prowse for Proust in Glasgow). Rigging hangs down to suggest the travelling, the fateful boat journey. Summer in the Villa Diodati is a strange, hallucinatory time. The poets and girls are discovered necking by Byron's doctor friend Polidori, whom Brenton transforms into a sour receptacle of critical loathing and envy. They must not win. I could not stand it.

But the two poets continue Platonist discussions unabated and the Venetian episode, those long disquisitions by gondola, incorporates a haunting passage about the Maniac from Julian and Maddalo. The production by the touring company Foco Novo (in association with Leicester) is not, I feel, really up to the play. It is tentative, a bit twee (the music of Andrew Dickson is finally irritating although the combination of saxophone and distant voices of earth and ether, is a good one), and badly cast.

Fool for Love/Cottesloe
Michael Coveney

In New York, I found Sam Shepard's Fool for Love a strange, bewitching, shattering, dead-of-night sort of play. The author had directed it. Above all, it is a play about the physical and emotional aspects of Eddie and May, angels with dirty faces, locked in a sibling impasse of incestuous recrimination, throwing each other hard against the green shiny walls of a motel on the edge of the Mojave desert.

powerful. It is, in short, a bit of a doddle to sit through and not very funny. The occasion lacks a five letter quality beginning with "b" that we associate with the masculine gender. Shepard attributes a broken-down quality to Eddie, the appearance of one who is rarely of a horse. Ian Charleson looks rather as though he is just coming back from the States, despite the face stubble, the boots and the startled brush of hair. Eddie's a stuntman, a roaster, one of Shepard's branded urban cowboys. When he hears May has a date coming, he threatens Eddie unceremoniously he lassos a yellow plastic chair and thumps it against the wall.

mother of the girl he was to love before he knew he should not. There is an uneasy structural device: the presence on the edge of the stage of an Old Man, the father, in a rocking chair. He is hooked on the folk singer Barbara Mandrell, the woman of his dreams. His real women have let him down. But Tom Watson's performance does not explain very much of what the Old Man is doing.

Frogs legs and the French film industry

"Paris est complet, monsieur." The chilling words rang out from the hotel accommodation lady on the motorway 50 miles outside Paris. Packed out by the Salon d'Automne, the city had no room for me at any hotel.

open soon - France is facing Britain's problem of proliferation of production sources. During my stay in France, Le Figaro was turning its arts pages into an open forum for letters and articles about French cinema. In particular, how is the industry to cope with the triple threat of escalating production costs (the average French movie budget has climbed by 30 per cent in a year), a downward productivity graph (231 films made in 1981, 184 in 1982, 131 in 1983) and an alarming financial failure-success ratio (80 per cent of French films don't break even)?

talented new French directors. Surely the glory of the French New Wave back in the 60s was that directors were forced by lack of capital to invent a new kind of cinema? To shoot on the streets, with shoestring budgets, creating a new movie language as they went along? Mightn't the same pressures produce the same results today? "But those film-makers, the

might be a new discovery or at least a key to the lively cinema of the future. The French cinema has been forced by levels Zidi baffles. This cashed-around police comedy stars Philippe Noiret as a corrupt old inspector showing the dodging ropes in an initially idealistic young tyro. But if the soggy mix of farce, home-spun cynicism and sentiment-

world-wide fame in Un Homme Et Une Femme, still likes Leouch's film-making methods, which show up the heavy hand of the Nouvelle Vague. "He won't show you the complete script," the baggy-corduroyed star told me as we stood on Pouilly's 1940s-dressed railway station in the shadow of a wheezing WW2 vintage steam train. "He feeds you the story day by day, and he'll often not give you your lines until ten minutes before shooting. So there's always this sense of freshness and spontaneity."

the French New Wave was its bang-up-to-date. Even when Godard and Truffaut tipped their hats to the past, they were a gangster film in Breathless, the MGM musical in Une Femme Est Une Femme—the rest of their clothing and gestures were brand new. But even the French directors who cite a ripple of expectation today, like Jean-Jacques Beineix of Dico, seem mired in borrowed or beautiful style.

For nearly 75 minutes Ms Fouere holds the stage with the help of musical punctuation by Roger Doyle (a co-ordinator with Brendan Ellis) and John Comiskey's lighting. Aidan Carl is a superbly strong, slightly recalls the baroque lyricism of the central speech in Sweeney Todd Summer when Catherine remembers her kinky cousin cut into collops by cannibalistic

Nigel Andrews searches for signs of life in the French cinema.

"auteurs," he said, "they are all fine, but they do not provide the commercial base for French cinema. They never did, the Godards and Truffauts and Rohmers. You know, there are people abroad who think all Frenchmen eat frog's legs. But in 99 per cent of French restaurants you won't even find frog's legs on the menu! The auteur theory is like that. People think a handful of directors define a national cinema. But do you know who is the most successful director in France during the last twelve years? Not Godard or Truffaut. Not even Leouch. Claude Zidi!"

Collapsé of Financial Times critic. Never having heard of M. Zidi, I went straight out to catch his new film Les Ripoux: thinking that here must be a populist director unchartered by the festivals or auteur-lovers who

The Diamond Body/Bush
Martin Hoyle

The Dublin-based ensemble Operating Theatre is currently at Shepherds Bush where, to judge from the friendly interest evinced by the Hibernian staff in the pub downstairs, they may find a home from home.

catamites. There is no doubt that Stephanos and his hominid coterie, by Isherwood out of Proust, are tiresomely precious in their self-conscious decadence ("they have every available recording of Clair de lune and that makes everything bearable"). But the milieu of the Easter Island Club whose leading light Stephanos is, abandoned by nervous members in the face of growing hostility, is intensely and hauntingly caught.

Arts Guide

Music/Monday, Opera and Ballet/Tuesday, Theatre/Wednesday, Exhibitions/Thursday. A selective guide to all the Arts appears each Friday.

PARIS
Felicity Lati, soprano, Graham Johnson, piano. Concert at the Grand Théâtre de l'Assommoir (742 0721).

WASHINGTON
National Symphony Concert Hall: Michael Tilson Thomas conducting, Shlomo Mintz violin, Dahl, Beethoven, Brahms (Thur), Kennedy Center (254 3778).

CHICAGO
Chicago Symphony (Orchestra Hall): James Levine conducting, Weber, Schubert, Strauss (Thur), (435 8122).

VIENNA
John Scott, organ, Mendelssohn, Schumann, Matthis and Liszt. St Stephen Cathedral (Wed).

ZURICH
Tonhalle: Tonhalle Orchestra conducted by Kasperzyk. Bloch, Chopin, Szymanowski (Wed); Choir and Symphony Orchestra of the Polish Broadcasting station Krakus with Fendrecki conducting Bach (Thur).

NETHERLANDS
Amsterdam, Concertgebouw, Bernard Haitink and the Concertgebouw Orchestra with Marinus Rintzler and the men of chorus of the Concertgebouw Orchestra Schumann and Shostakovich. Wed and Thur. (71 8345).

NEW YORK
New York Philharmonic (Avery Fisher Hall) Zubin Mehta conducting, Pinhas Zuckerman viola and violin, Telemann, Hindemith, Vivaldi, Bruch, Wagner (Tue); Myung-whun Chung conducting, Emanuel Ax piano, Bartok, Chopin, Dvorak (Thur), Lincoln Center (785 8555).

A Strindberg opera/Berlin Festival
Max Loppert

Arbret Reimann, not yet 50, is Germany's leading opera composer. The description is rather less grand than it may seem, for in neither West nor East has he been widely regarded as a flourishing artist (Stockhausen's grandiose series of theatrical Days hardly count as operas in any conventional reckoning).

The best thing about the experience was the fine individual performances of a splendid cast, largely made up of distinguished veterans: Hans Günther Nöcker as the malign Director; Donald Grob, William Dooley, and Horst Hestermann as his various victims; and the great Martha Mödl, giving a wonderful display of naked theatrical power, in the pivotal role of the Mummy (Reimann's writing for a mezzo still expressive but reduced in power and support, modulating between low-register keening and speech, is another model of practicality).

conductor of the Junge Deutsche Philharmonie ensemble was Friedemann Layer. In the opera house proper, the Deutsche Oper celebrated the festival with among other things, the inauguration of a new Ring, produced by the house Intendant Göttr. Friedrich. To a London opera-goer well acquainted with Friedrich's first go at Das Rheingold, the second was a surprise. The ideas behind it maybe the same (the tetralogy takes place in a theatre; gods and giants are greyed, Wotan's predicament is rendered in crude simplicities, Logs is a witty, wisecracking outsider), but the wholly new guise in which they are presented by Peter Szykora's designs, and the brilliance of the staging (less complicated, it still not ideally so, than the opera one), and the cool, unobtrusive performance itself was a bore, given with large forces (big orchestra, big choir, the Vienna Singverein) in a way that was not just old-fashioned—which can sometimes shed illumination in itself, vide late Kleopatra—but sumptuously soft-centred and soft-spoken, Bach without tension, toughness, or exhilaration. But it was an event treated, at the close, like a musical Second Coming, a masterpiece of sentimentality on all sides in which the conductor's part was enacted with spellbinding genius.

Mr Ridley's failure

THE SADDEST sight last Friday was of Mr Nicholas Ridley, the Transport Secretary, describing his White Paper on airline competition policy as an "almost ideal" blueprint for British civil aviation.

There was no historical inevitability about this. One might have expected the Government seriously interested in competition to have rejected the CAA's plan to cut BA's market share by about 11 per cent on the grounds that it was far too modest.

Why has the Government been so extraordinarily protective of the status quo? Its Parliamentary term has at least three years to run and it has no urgent reason to raise cash from BA's sale.

East Germany's 35-year itch

YESTERDAY East Germany celebrated a milestone anniversary. Thirty five years ago it was transformed from the Russian occupation zone into the German Democratic Republic.

But it is not an essentially stable division. However much it suits the rest of Europe—and it does (witness the recent disapproval of Pan-Germanism by the Italian foreign minister)—the present divide of Germany perpetuates a constant tension.

Another embarrassing incident like this mars East Germany's 35th birthday party, at which the media is playing the citizenry's affection for their socialist way of life.

Guy de Jonquieres sets the scene for the Government's flotation of British Telecom

WITH A PROFIT of £990m on £6.9bn turnover last year and about 240,000 staff, British Telecom operates one of the largest businesses in Britain.

between 29m telephones serving 20m customers—one of the largest networks in Western Europe. Last year, it handled 18.8bn local and 3.9bn trunk calls.

tariffs are among the lowest in the world and the UK is a major telecommunications centre for multinational companies operating in Europe.

Countdown for the biggest share sale ever

AFTER MONTHS of intricate and often feverish preparations, the Government is getting ready to press the firing button, hold its breath and — it hopes — smoothly into orbit as an independent privately-owned enterprise.

With only weeks left until the mid-November target for the sale of 51 per cent of BT's shares, nationwide promotion of the largest transfer of state assets to private ownership attempted anywhere in the world is now in full swing.

City institutions have been primed, regional brokers wined and dined and the general public deluged with a flood of television, newspaper and direct mail advertising.

But then the scale of the flotation, expected to raise some £3.5bn, seems certain to set new world records, dwarfing British Petroleum's £242m rights issue in 1982, the largest share sale in the UK to date.

The Government, which is counting heavily on support from small investors, has unveiled a generous package of inducements to tempt them. For a standard rate taxpayer buying £1,000 worth of shares the annual return is expected to exceed 17 per cent, including rebates on his telephone bill.

The favourable comparison with building society rates may prove decisive for many small investors. But what sort of a company will they be buying? Can a nationalised industry, with an unenviable reputation for inefficiency and indifference towards its customers, really become a growth performer?

on computer-controlled networks will replace conventional telephone traffic as the main source of the organisation's revenues.

BT's ambitions also extend overseas, where it is already scouting for possible acquisitions and joint ventures. "We're in an international business and have not to be parochial," says Mr Colin Crook, managing director of BT Enterprises, which is responsible for sales of equipment and competitive network services.

Such visions mostly remain to be fulfilled. Yet BT, under a revamped top management, has started to tackle some of its most glaring shortcomings and is displaying increased commercial aggressiveness. One example is in the rapid-fire introduction and robust marketing of an array of advanced new business services such as videoteleconferencing, high-speed data circuits and electronic mail.

BT starts with one overwhelming advantage—unrivaled dominance over the UK telecommunications market. Through its legal monopoly has been dismantled over the past three years, its business has been barely dented by competition.

The proposed link poses an awkward test for Government telecommunications policy, one of whose prime objectives ironically, has been to jolt BT

into exercising just the kind of commercial initiative which has led it to join forces with IBM.

Until 3½ years ago, when Sir George Jefferson was brought in from British Aerospace, BT's structure and operating methods had changed little since the 1930s. Administered by engineers with an ingrained rule-book mentality and tied to Whitehall's apron strings, it lacked even the most rudimentary management and financial controls.

Its management is still striving, too, to gain a grip on basic financial information about its operations. In spite of a crash programme to install modern accounting systems, it will not be able to provide in the flotation prospectus more than the rather notional breakdown of segmental profits which it has published in past annual reports.

In the rush to reorganise, other loose ends have undoubtedly been left hanging. The split between the responsibilities of central headquarters and the newly-developed business units is not always clear, while precise demarcation lines between some of the main operating divisions are still being drawn up.

Some industry experts also believe that in its zeal to decentralise decision-making, BT has not paid enough attention to developing a long-term overall strategy for longer-term business development. "So far, it's been largely a policy of management by energy and let a thousand flowers bloom," says one.



Whitehall. It has successfully fought off earlier Government proposals to sell it off in pieces, secured an acceptable capital structure and obtained an operating licence which appears unlikely to be seriously compromised by its commercial freedom.

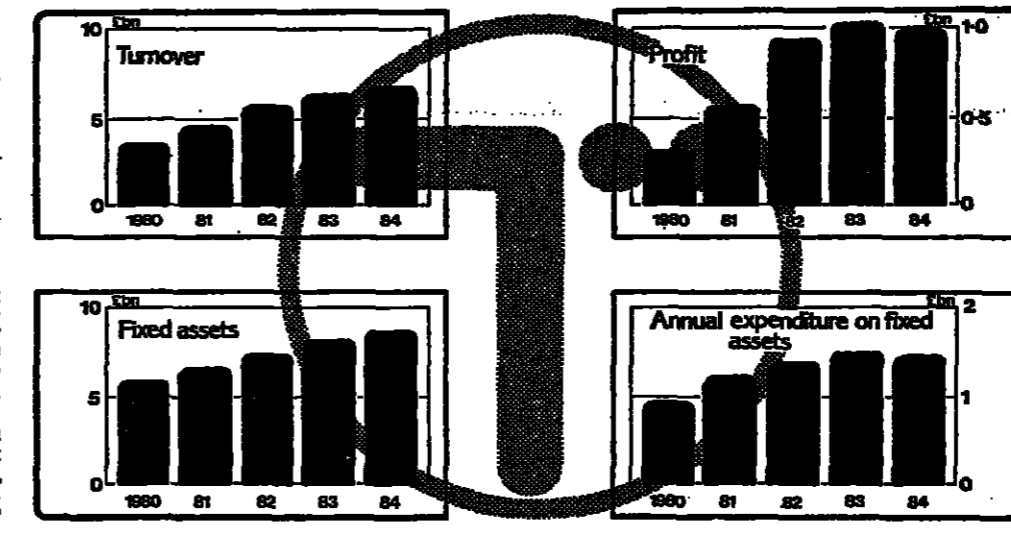
For the foreseeable future, a privatised BT will face two principal curbs. One, that the authority created to regulate the telecommunications market—is largely an unknown quantity. It begins life with a modest staff of about 50, and much may depend on the personal determination and independence of its director general, former accountancy professor Bryan Carsberg.

The second restraint is the "RPT-X" formula which requires BT for the next five years to hold tariffs for most of its inland public network services to an average of three percentage points below the retail prices index.

The formula covers less than 60 per cent of BT's turnover and will allow it to continue raising charges for residential service faster than for lucrative long-distance traffic. BT insists that such "rebalancing" is essential to meet the challenge of competition on its money-making routes.

The Government argues that the "RPT-X" arrangement will, unlike the regulatory mechanisms in use in the U.S., encourage BT to improve productivity and efficiency by cutting costs. How real that incentive turns out to be remains to be seen.

BT reduced real unit costs by 5.8 per cent last year and says it is on course to reduce its staff by 15,000 in the three years to next March, mainly by attrition. However, managers concerned privately that it has some way to go to match the manning levels of leading U.S. telephone companies.



New friends for Mickey Mouse

Watch out Mimmie, Mickey Mouse has found a new friend. His name is Sid Bass, the 42-year-old leader of the hugely wealthy Edwards brothers clan which now owns a 24.83 per cent chunk of Walt Disney productions worth around \$460m.

Sid, the eldest son of Perry Richardson Bass, 69, the oilman and former Texaco salesman who founded the family fortune, "wildcatting" with his uncle, Sid Richardson, in the 1930s.

Sid broke with family tradition by speaking publicly about the Disney stake. He assured Disney's new management that the Bass brothers are widely believed to have helped install that no further Disney stock purchases are foreseen and added we have no intention of meddling in the day to day operations of the company.

The move appeared designed to allay fears that the Bass boys planned to use the Disney stake they have amassed during a bitter six-month long battle between the entertainment group's management and string of would-be suitors and stock speculators including Saul Steinberg, Ian Boesby and Irwin Jacobs for anything other than friendly investment purposes.

That Sid felt the statement was necessary at all says a lot about the fear the "Brothers from Texas" sometimes strike into management hearts. Earlier this year, after one of their many celebrated and profitable forays, Texaco bought out a 9.9 per cent stake in the oil plant built up by the Bass brothers for \$1.25bn including a \$450m "greemall" premium.

Men and Matters



"I've seen it atournemouth, Blackpool, Brighton and a different person wins every time."

or their relationships with each other. Their stake in the west coast entertainment empire has restored a certain calm to the strife-torn Disney organisation. But some observers are already asking how long the honeymoon will last.

Final solution

The prospect of retirement does not sit easily with George Schierfenberger, beskeeper, skier, fly fisherman, and chairman of the U.S. conglomerate City Investing.

Hot associations

After managing one of the most unusual industrial companies in the UK, Alan Tweedale has decided, at the age of 50, to become his own boss. For the past seven years, he has been chief executive of Associated Heat Services, the Wimbledon-based concern which specialises in stocking other companies' boilers.

With the blessing of former National Coal Board chief, Lord Ezra, who is now chairman of Associated Heat, Tweedale is setting up his own company, Energy Components, to manufacture equipment used by the fastest growing part of Associated Heat, which last year had a £39m turnover.

These are mobile additional boilers for companies wanting to switch to solid fuel without the hassle of scrapping their existing boilers. "If I don't do it now I fear I will regret it," he says. Bursting with new ideas for the future, he also wants to resavour the insecurity of his first years at Associated Heat. It was formed in the mid-1960s at the instigation of the National Coal Board, to save at least

Culinary Thesis

A silver spoon is pot' the only ticket to prosperity, claimed Welsh Secretary Nicholas Edwards during his visit to Tokyo. A stainless steel knife and fork will do just as well. Edwards adopted this improbable culinary thesis in Tokyo where he was singing the virtues of the valleys to potential and actual Japanese investors.

One company which he visited, Matsushita, told him that staff at its Cardiff plant were leading components on circuit boards faster than staff doing the same job in Tokyo.

Cats crop

Uncheckable stories from China always raise doubts in my suspicious mind. But the New China News Agency stakes its reputation on this one. China's first cat farmer is reported to be thriving as he provides logistical support for a national campaign against rats. Since opening his cattery last year former teacher Liu Guocheng, aged 23, has sold 2,400 animals for raising, for pets, and—sure I report this—for delicacies at the dinner table. China has been badly plagued by rats, since the number of cats fell during so-called cultural revolution of the 1960s. Food was short for cats and humans alike then.

IMPORTANT NOTICE TO HOLDERS OF 4% CONVERTIBLE DEBENTURES OF AM INTERNATIONAL, INC.

This Notice is to advise holders of 4% Convertible Debentures due 1988 of AM International, Inc. ("AMI"), formerly Associated Midland Corporation, of the procedure for surrendering their debentures in order to receive the distribution due them under AMI's Plan of Reorganization ("the Plan").

The Plan was confirmed by an Order of the United States Bankruptcy Court for the Northern District of Illinois, Eastern Division, dated September 11, 1984. The Plan provides that holders of AMI's Convertible Debentures will receive distributions of cash and new common stock of AMI upon surrender of the Convertible Debentures and delivery of a Letter of Transmittal to the Disbursing Agent under the Plan, State Street Bank and Trust Company ("State Street Bank").

and requesting the "Letter of Transmittal for AMI International 4% Convertible Debentures." The Letter of Transmittal may also be obtained at the office of Citibank, N.A., 5 Hanover Square, 14th Floor, New York, New York 10048, USA. Attention: Corporate Trust Department, at the office of Citibank, N.A. in Amsterdam (Herengracht 545-549, 1017 BW, Amsterdam, The Netherlands), in Brussels (Avenue de Tervuren, 249, B-1150, Brussels, Belgium), in London (Citibank House, 336 Strand, P.O. Box 78, London, England WC2R 1TB), in Milan (Foro Buonaparte N. 16, 20121, Milano, Italy), in Paris (Citibank 19 le Parvis La Defense 7, Paris, France), at Citibank AG, Frankfurt/Main (Neue Mainzer Strasse 40/42, D-6000, Frankfurt/Main, Germany) in each case, Attention: Manager, Securities Department, and at the main office of Kreditbank S.A. Luxembourg (37 Rue Notre-Dame, Luxembourg-Ville, Luxembourg).

No distribution under the Plan will be made to a holder of AMI's 4% Convertible Debentures until the debenture certificate, accompanied by the Letter of Transmittal, is delivered to State Street Bank in accordance with the instructions set forth in the Letter of Transmittal.

After the summer lull, Europe's defence debate is once more gaining momentum.



Dr Manfred Wörner (far left), the German Defence Minister, and Mr Michael Heseltine, his British counterpart, visiting Nato's "Lionheart" wargames in West Germany last month

Foreign affairs: defence collaboration

Why nit-picking is not enough

By Ian Davidson

It is a symbolic snooze. Is there a real case, ask the nit-pickers, for resurrecting this association?

view of the European Community — and of their obligations in Nato if it comes to that; and from the Greeks, who take a minimalist view of almost everything except their hostility to the Turks.

These institutional debates, it may easily be deduced, are merely a smokescreen. The real problem is not where you meet, but whether you can agree on the seriousness of the European defence issue and the reason for meeting at all.

Some of these reasons are set out at length in a forthcoming article in International Affairs by the director of Chatham House and three of his colleagues.

The first heading is the general commitment of the U.S. to the defence of western Europe. European countries have long based their defence policies on the assumption that the Americans would be with us permanently; but given the facts of history and geography, this has always been a questionable assumption.

As of this moment, it is beginning to look rather doubtful that the Rome meeting will advance the debate very much. At its previous meeting on WEU in Paris in June, the governments agreed to table some precise proposals for future action, but so far nothing very useful has been received.

If the WEU meeting does turn out to be a harbinger of a more serious institutional explanation: if there is to be a serious discussion of Europe's defence, WEU is not the right forum to hold it in.

Some people say that WEU has the wrong membership; others that its reservation would represent bureaucratic proliferation, cutting across the competence of NATO's institutions like those of WEU.

Premium refund on death

From Mr P. W. Wright

Sir,—Mr Elcher in his letter of September 28 has questioned the practice of the UK life assurance industry in not providing a proportionate premium refund on death.

Letters to the Editor

area, it is likely to be efficient. Are we really to expect that if a local authority gains the monopoly of all local services it will become more efficient?

Clearly, housing associations, as a model (there are other models too), are non-elected bodies, but monitored in the interests of public policy.

2—Shareholders are always at liberty to sell their shares at any time providing a buyer can be found at an acceptable price.

Index-linked gilts interest delays

From Mr Keith Tunstall

Sir,—In the article on index-linked gilts (September 28), Clive Wolman stated that the RPI measurement was applied with an eight-month lag for administrative and technical reasons.

In their letter Travers and Burgess fall to consider what is the appropriate objective of local government. Instead, we should ask if local government is to provide all local services?

4—Bank borrowing is generally repayable "on demand" and the company directors acting on behalf of the shareholders presumably initially accepted this arrangement.

5—Preference shares would not be attractive as this would simply mean that in the event of a subsequent liquidation before the redemption date, the bank's equity (previously secured) would be depleted by payments to preferential and trade creditors.

An important consideration should be whether local authorities are the best organisations to provide local services, in part or in full. It is likely that no general answer will be found except on ideological bases.

Housing associations generally have a comparatively good reputation on repairs.

6—UK banks, of course, take equity stakes in companies and if I accept that this happens on the Continent as a result of converted debt, are they taking say £40-£50m at a time? (The issued share capital of the company in question was only £20m.)

Reform of local government

From Dr Richard Prentice

Sir,—In their principles for local government reform Messrs Travers and Burgess (October 2) show an untested faith in the value of spatial monopoly.

Richard Prentice, Department of Geography, University College, Swansea.

Without competing providers, tenants face a spatial lottery as to the adequacy of their landlords and prospective tenants a spatial lottery in terms of their access to a tenancy.

In conclusion, I suppose many things will elude me on life's journey, but one maxim I learned and recalled springs to mind "If you can't afford to lose—don't gamble."

Bankruptcy and the banks From Mr Colin Newhouse Sir,—Mr Hodson's reply (October 3) does little to convince me that his suggestion has merits and I believe indicates where his true interests lie.

a decade, Americans have been expected to defend rich Europeans against poor Russians, and the question is once again becoming insistent, with the Nunn-Cohen moves in Congress to reduce U.S. troops in Europe if the Europeans do not step up their own defence efforts.

It is all very well for the Europeans to conduct a sales campaign; to point out that during the 1970s, European defence spending was rising when U.S. spending was falling, or to claim that Europe provides most of the forces for its own defence.

The second general heading is the guarantee of strategic nuclear weapons in Europe. Nato depends on the threat to use nuclear weapons as its ultimate deterrent to Soviet aggression, and in the last resort Europe's security is held to depend on the guarantee of strategic nuclear weapons in the U.S.

Unfortunately, nuclear parity between the superpowers has cast serious doubts on the credibility of that guarantee as a deterrent, and detailed analysis of the Alliance now suffers from a failure of deterrence has cast even more serious doubt on the controllability or limitability of nuclear war.

But the nuclear doubts also explain the third structural problem: the breakdown in the political consensus on defence posture, exemplified by the veering of the SPD and the rise of the Greens in Germany, and by last week's Labour Party vote for unilateralism in Britain.

Needless to say, the transparent hypocrisy of the Labour Party does not begin to solve the nuclear problem; unilateralism would not make Britain safe from nuclear war, and none imagines for a second that a future Labour government would join Britain's partners in Europe in increasing defence spending so as to provide an effective conventional deterrent.

So far, only the French and Germans seem to be thinking in these terms. The British, who have mishandled their strategic relationship to Europe so many times in the past seem determined to marginalise themselves once more, dithering between a sort of sub-Gaullism and a traditional Nato-oriented immobilism.

Lombard Time to channel our energies

By Nicholas Colchester

THE MOMENT for the cross-Channel link has surely arrived. In both Britain and France ministers sit sweaty-palmed in their inability to do anything about mounting unemployment. There are 2.3m jobless in France and the country's industrial shake-out has been late in starting and has some way to run.

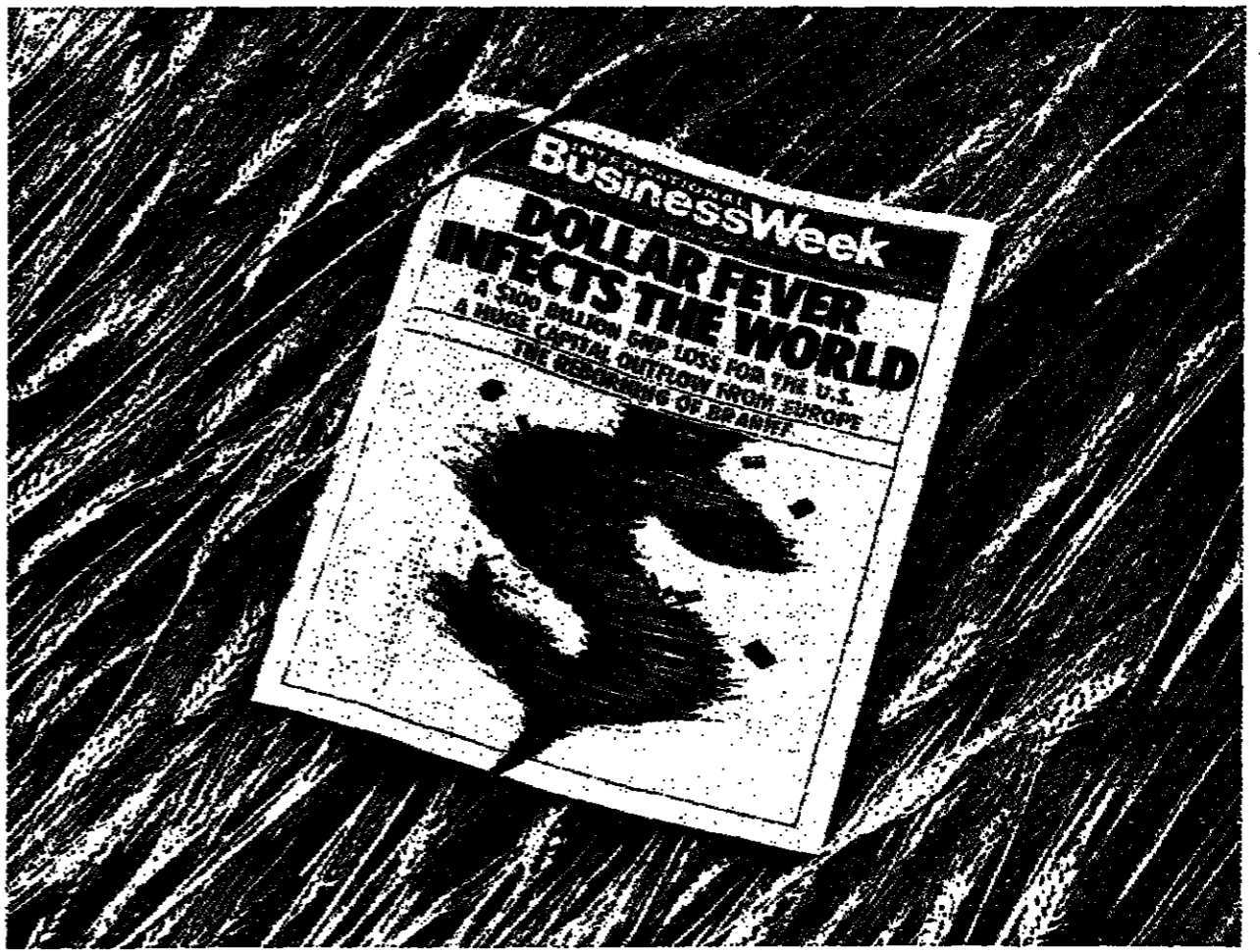
A cross-channel link is, of course, no solution to this problem in terms of the number of jobs it would create. But British ministers should not ignore the psychological importance of a decision of this sort. There has to be a positive side to the Government's vision. There has to be a feeling in the air that more than a scorched earth policy is being pursued.

The result is a sterile standoff. The Government insists that the British private sector should decide what sort of link it is willing to finance, and link it with it. The private sector insists that it needs a plethora of promises from the governments of both Britain and France before it feels enough of a free agent to take the plunge.

Yet it is hypocrisy to claim that a channel link could ever get under way without the active participation of both governments. Imagine where the M25 motorway would be today if it had been the brainchild of a private consortium. The Channel project will be of such a scale that many policy areas of government will be affected by it — monetary, regional, competition, environmental, industrial, transport, immigration, foreign relations and defence.

In doing so they should identify the most ambitious project that seems economically justifiable. Surely, when the vast majority of the 20m people and 13m tons of freight crossing the Channel every year base their voyages on road vehicles, the solution must include a direct road link? A detailed study by five major banks earlier this year suggested that a road link would be the most profitable option but balked at the technical risks and the scale of the project involved.

The Euroroute bridge-tunnel version involves an estimated cost of around £2.5bn for each country and half-a-million man-years of work split between the two, with a great deal going to steelworks and shipyards. By comparison, Concrete cost each Government roughly £1bn and unemployment will cost the British Government roughly £15bn this year. Mrs Thatcher needs to find a big gesture and the French President's forthcoming state visit to London could provide the occasion.



Two of America's most valuable exports.

Business Week International is a commodity business people all over the world value. No other magazine covers important business events and developments in America and throughout the world with more thoroughness and accuracy. And Business Week International does it week after week after week.

Week International. And best of all, it's the one export that can be air delivered directly to your home or office every week. Just fill out and send in the coupon below.

Portfolio, free. This 180-page dossier includes fascinating reports on key trends in management, marketing, banking and 15 other areas, that will help shape your business strategies. It's free with your paid subscription to Business Week International.

Subscribe now. And get the Executive Portfolio, free. Yes, send me Business Week International for one year (51 issues) at the discounted rate for my country (see below) and bill me later. The rate shown is a saving of 30% off the basic subscription price.

Subscription form with fields for Name, Position, Product or Service, and Country. Includes a list of countries and rates.

But Business Week International does much more than report the news. It interprets and even anticipates. So you not only know what's happening in business throughout the world, but why. And, more important, you learn what may happen next.

HIAB The best selling Lorry Loaders in the world... Tel: 01-965 6588

FINANCIAL TIMES

Monday October 8 1984

SERVICEPOWER The world's leading distributor of earthmoving equipment BLACKWOOD HOODE

Terry Byland on Wall Street

Knee-jerk reactions to banks

IT WAS not a happy week for banking stocks. The upset at First Chicago attracted most of the attention...

Nevertheless, First Chicago's write-off and loss prediction caught the sector off balance. By the end of the week, when the money centre stocks were showing falls of 7 or 8 per cent...

First Chicago's problems, ran the refrain from some banking analysts, were "very specific to it" and the market was "overreacting". Those same analysts, however, were more cautious in their opinions at the end of the week...

Bank stocks quickly resumed their downward trend on Friday and the week ended with losses in stock prices throughout the sector.

The implications of last week's developments may not be restricted to those banks involved with First Chicago's batch of troublesome loans in the U.S. sugar, energy and agricultural sectors. They have cast a cloud over the full range of domestic loan portfolios of the banks...

These new doubts took shape, unfortunately for the bank stock sector, just when some analysts were running their tape measures over the existing portfolios and assessing the success of the bankers in dragging in the arrears in interest payments from reluctant payers.

Wall Street has grown accustomed to hearing the banks report proudly on their success in chasing up the bad payers just in time for the quarterly deadline.

But Mr Laurence Cohn of Dean Witter summed the stock market by reporting that Citicorp, traditionally the most aggressive of the debt collectors, has run into strong resistance from the debtors this time.

He believes that Citicorp has pulled in only about 5 per cent of the interest payments due on non-performing loans, compared with its normal success rate of 10 to 12 per cent. Of course, most non-performing loans are eventually paid up and the banks are at present accustomed to collecting only 3 to 4 per cent of payments due. If Citicorp's success rate has been halved, however, what does that mean for the rest of the industry?

Dean Witter's Mr Cohn telephoned clients last week to say he was reducing his forecast for Citicorp's third-quarter earnings to \$1.50 a share and for the full year to \$5.50.

If the banks are facing problems with their domestic loans and, at the same time, finding it hard to obtain payments on their existing non-performers, then the third quarter results could bring some nasty surprises.

Wall Street is bracing itself for increased loan loss provisions all round, and it will not deal lightly with banks which prefer to boost earnings by failing to make suitable provisions.

U.S. prices, Pages 24-27

Gromyko raps U.S. on arms talks

BY LESLIE COLLIT IN EAST BERLIN

MR ANDREI GROMYKO, the Soviet Foreign Minister, said yesterday that Moscow was prepared to conduct an "honest, open dialogue" with Washington on curbing nuclear arms if the U.S. showed a "genuine interest" in limiting the arms race.

Mr Gromyko, speaking at the 35th anniversary celebrations in East Germany at the weekend, his first speech since he met President Ronald Reagan last month, said that time would tell if Washington was prepared to make any positive changes in its policies.

The U.S., he said, had reacted negatively to Moscow's proposal to be-

gin negotiations on preventing nuclear warfare in outer space. It was trying to "conceal with all means" its refusal to ban such weapons. Mr Gromyko also made a sharp attack on West Germany, warning that Bonn was aiming to eliminate East Germany and was calling into doubt the territorial realities in Europe. Bonn wanted to end the Socialist order in East Germany and incorporate the country into West Germany, he said.

By comparison, Herr Erich Honecker, East Germany's leader, was only mildly critical of West Germany. He was recently unable to

visit West Germany because of Soviet opposition. Herr Honecker said there was no "open" German question and that the sooner Bonn understood that there could be relations only of sovereignty and equality with East Germany, the better. The East German leader spoke of his country's "indefectible" alliance with the Soviet Union and, with Mr Gromyko, signed a 15-year technology, production and science agreement designed to the East German more closely to the Soviet Union.

The tensions between Moscow and East Berlin and the unresolved fate of nearly 100 East Germans who have taken refuge in the West German embassy in Prague cast a shadow over the East Berlin ceremonies.

Throughout the weekend in East Berlin the 75-year-old Mr Gromyko displayed the authority and stamens which have given his voice such weight under the desultory leadership of Mr Cherenin.

He scowled as Herr Honecker spoke, stood ramrod straight as tens of thousands of young East Germans passed before them in a torchlight procession and saluted throughout most of a 45-minute review of East German troops parading before him.

UAW head urges GM members to accept deal or face strike

BY TERRY DODSWORTH IN NEW YORK

MR OWEN BIEBER, president of the United Auto Workers union of the U.S., has delivered a strong warning to his members in General Motors that they face the prospect of an all-out strike if they fail to ratify the recently concluded wages contract.

His statement, which came as crucial votes on the agreement got under way, was seen as an attempt to rally rank-and-file membership in the face of strong opposition to the contract in some plants.

He insisted at a press conference that the deal was a "good" one. If it were not ratified, he added, he would call the GM workforce out on strike rather than go back to management and try to renegotiate.

The UAW has not given figures for voting so far, on the new contract, which must be ratified by Sunday. But the indications are that polling has been very close, with the number of members in favour of the deal only slightly ahead.

Voting over the weekend will be crucial to the outcome, since it in-

volves the big concentration of GM plants in Flint and Pontiac in Michigan, some of which are noted for their militancy.

The main opposition to the agreement is centred on widened differentials that will give skilled workers pay rises of about 3.5 per cent in the first year of the contract against only 1 per cent for employees at the bottom end of the scale.

This is regarded as a radical step in wage bargaining in the U.S., where the trend has been to reduce differentials. But it is proving difficult to sell to the workforce because the bulk of employees in the heavily organised assembly plants would be receiving increases of about 2 per cent in basic wages or even less.

GM also faces problems in its Canadian plants, where it is trying to negotiate a similar agreement to the U.S. contract. The local branch of the UAW insists that it will not accept the U.S. differential pattern and is also asking for a reduced working week of 37½ hours on the West German pattern, along with

France and UK bid for \$5bn U.S. army order

By Bridget Bloom, Defence Correspondent, in London

RIVAL BIDS for a U.S. army contract which could be worth more than \$5bn have been made by British and French telecommunications companies.

The bids, to supply 25 divisions of the U.S. army with a new battlefield communications system, were submitted by consortia involving Plessey of the UK and Thomson-CSF of France.

Plessey, in conjunction with Rockwell International of the U.S., has put forward its Parmigan system, which is about to enter service with the British army. Thomson's system, known as Rita (Réseau Intégré de Transmissions Automatiques) has been progressively deployed since 1982 with the French and Belgian armies. Thomson is in partnership with the U.S. company GTE.

The army contract is believed to be the largest single U.S. military contract ever opened to foreign competition. Unusually, there is no U.S. manufactured battlefield communication system which is directly comparable to Parmigan or Rita.

Initial funding for the equipment has been obtained by the present U.S. Administration, but there are inevitably fears in London and Paris that the competition to supply the U.S. army could be put at risk either by political changes in the Pentagon or the American presidential election or by the powerful U.S. defence industrial lobby.

Mr Michael Heseltine, the British Defence Secretary, has ordered the Ministry of Defence to give full support to the British bid, which also involves a number of other British companies in the supply of subsidiary equipment.

The French Government habitually supports French industry in its arms export drive, but it is less usual for the British Government to do so.

Company officials are unwilling to disclose details of their bids, which will be negotiated into "best and final" offers over the next few months. The British and French companies have apparently found difficulty in conforming to some of the U.S. specifications, particularly those requiring quotations in fixed dollar prices.

Background, Page 4

UK plans for market control

Continued from Page 1 ahead of the publication of the full White Paper (policy document) to wards the end of November.

The intention is still that a major Financial Services Bill will be introduced in the 1985-86 session of parliament. This will cover not only the new statutory banking for the self-regulatory authorities but also a review of relevant aspects of the existing Protection of Fraud, Investment and Companies Act, covering, for example, company flotations.

The new authorities will be run by councils consisting both of practitioners and representatives of investors and policyholders and will be backed by small secretariats.

Tax fillip for French bonds

BY DAVID MARSH IN PARIS

THE FRENCH bond market, profiting from steadier foreign confidence in the franc, has already set a new issue record for 1984 with three months of the year still to go.

New issues so far have topped the FFr 200bn mark, compared with volume of FFr 194bn in 1983, FFr 154bn in 1982 and only FFr 107bn in 1981.

Last week's news that France is joining West Germany in ending the nominal 25 per cent withholding tax on non-residents' bond purchases helped to keep up the market's good spirits. State bond yields fell by about 0.4 points during the week to 11.5 per cent on Friday, with dealers reporting a rush of demand and all too little available paper to satisfy investors' appetites.

Amid an upsurge in foreign institutional demand in recent weeks, banks have been lobbying the Treasury to reopen the relatively unregulated Eurofranc bond sector, which has seen no new offering for 3½ years.

The Treasury, aware that a move to allow Eurofranc issues (for the first time since the Socialist Government took power) would mark a political milestone, is adopting a wait-and-see attitude. A franc bor-

rowing for the World Bank is rumored to be on its way soon, but it is not clear whether it would be a Euro-issue or a standard domestic market transaction.

With the dropping of the withholding tax (although that, as in West Germany, still has to be approved by parliament), the demarcation line between the Euro and domestic sector will now be narrowed. Previously, the 25 per cent tax was not payable anyway on state bond issues, while double taxation agreements with leading investing nations in Europe and the Middle East reduced the net rate of imposition in many cases to between 5 and 15 per cent.

The psychological effect of its removal might, dealers say, encourage U.S. pension funds to take a closer look at the French market in their efforts to diversify. By chance, last week a visiting group of U.S. fund managers was being fêted by banks and companies in the Lyons area anxious to attract U.S. investment.

Foreign demand had a clear impact on the success of the latest state bond issue, the third of the year, raised to FFr 20bn from the

initially set FFr 15bn at the end of last month. Along with the steady stream of issues for state and parastate bodies (the latest FFr 5bn bond for Crédit Foncier was clearly over-subscribed), dealers also report activity in the private placement market. The French subsidiaries of Kodak and Philips have recently raised funds in that area, where transactions generally are in the FFr 50m to FFr 150m range.

Although the Government's budget deficit is clearly overshooting this year, the market's mood is still bullish. Portfolio managers' coffers have been swollen by large inflows into unit trusts. Real yields (with inflation now down to around 7½ per cent) remain attractively high - partly because of the Government's extreme caution in countenancing cuts in banks' base lending rates.

With the franc still steady against the D-Mark after more than 18 months in the European Monetary System without a realignment, the view of the international investment community is that there will be no undue currency risk at least for the next three or four months. Int'l Capital Markets, Page 17, 18

Sleipner route accord sought

BY DOMINIC LAWSON IN LONDON

ENERGY MINISTERS of Britain and Norway, meeting in London tomorrow, will attempt to come nearer to a resolution of the disputes that are holding up the signing of a £20bn (\$24.5bn) deal to supply the UK with gas from Norway's Sleipner field.

The main obstacle to the deal is an argument over the route to be taken by the gas liquids contained in the field. Norway wants them to travel by a Norwegian-owned pipeline to Teesside in North-east England, while the UK wants them to go by a UK pipeline to Flotta in Orkney. At stake is about £200m of tax revenue.

At their regular annual meeting

Mr Kaare Kristiansen will put to his UK opposite number, Mr Alick Buchanan-Smith, a compromise whereby the Teesside route will be chosen in exchange for Norway giving up a proportion of the tax revenues to the UK.

However, Norwegian optimism that their solution will bring a speedy end to the dispute is not shared by British officials. They regard such a deal as opening up major fiscal and administrative problems which the Norwegians have yet to tackle. Indeed, Mr Buchanan-Smith said at the weekend that he did not expect any agreement at the meeting.

This issue is one of two still blocking agreement on the deal. The other concerns access for British companies to orders on the Sleipner development project. British Gas, the purchaser, and Statoil, the field operator, have reached firm agreement on the revised commercial terms for the transaction.

These involve a payment of \$4.10 per million British thermal units (BTU) of gas. Peak supply of Sleipner gas in the late 1990 would be 32bn cubic metres rather than the 39bn to 42bn cu m called for in the original draft contract agreed in January. UK gas sales drive, Page 5

World Weather table with columns for location, temperature, humidity, etc.

Congress shuns new trade curbs

Continued from Page 1

use subsidised natural resources in the manufacture of exports (a clause aimed at certain Mexican products); and to expand the scope of U.S. trade laws to make it easier to prove unfair trade in cases where exporters are incorporating cheap dumped imports into the products they sell to the U.S.

A clause designed to make it easier to bring unfair trade cases against non-market economies, which was seen as aimed at China, was also dropped.

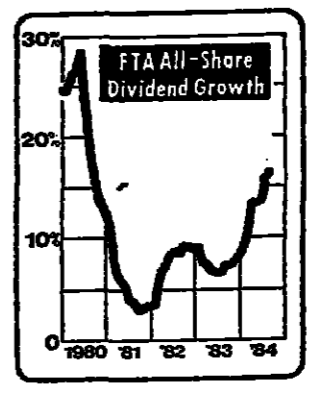
U.S. footwear manufacturers,

who were denied protection earlier this year by the U.S. International Trade Commission because their industry is profitable, won a concession that the profitability of an industry is only one of several factors to be taken into account in determining injury in a trade suit.

Efforts by the U.S. steel industry to secure new laws which would tighten up the protection which they won from President Reagan last month, were also fended off. Instead of a 17 per cent target for imports' share of the domestic market,

THE LEX COLUMN Dividends make up for lost time

There are plenty of good traditional reasons why one might expect the London equity market to have been feeling rather sorry for itself by now. There is, after all, a general expectation of slower economic growth in 1985. On the face of it this is an odd thing for the market to anticipate by pushing the All-Share upwards. Yet it has recovered almost exactly 15 per cent from its low point in July, a revival which seems to need at least a bit of explaining. One strong candidate for the role of missing link is the remarkable spurt of dividend growth, which has now been accelerating without pause for the last 12 months.



Individuals would be a fairly good reason for retaining profits in the company, in the shareholders' best interests; whereas if the shares are mainly held by gross funds - taxable on the dividend - the case for high retention becomes at best marginal. In a tax-free world, and one where it cost nothing to pay dividends or get rights issues underwritten, companies and investors alike might well be indifferent as to whether dividends were ever paid. The decisive question then should be whether the company could make better use of its funds than the shareholders, earning a higher rate of return than they can obtain elsewhere. And in sober reality, success in persuading the market that a company can achieve superior normal returns (at any rate by the standards of its sector) is one route to keeping its shares at a lower yield than the average.

Although dividend growth of about a tenth in 1984 might have seemed quite reasonable this time last year, the actual figure now looks more like reaching 18 per cent. And the value of that increase - which amounts to real income growth in double figures - is far greater than anything the market has seen for a decade. Last time there was a comparable pick-up, after the removal of dividend controls in 1979, almost all of it was mopped up by inflation.

Income stream

Looking backwards, it is easy enough to see why institutions should be feeling more amiable towards their industrial investments - quite apart from the fact that increased dividends will make it a lot easier to pay for the compulsory tranches of Telecom. And the warm feelings are not entirely retrospective: the managers of long-term funds and the finance directors of public companies both know that once a dividend has been settled, only inflation or desperation can be allowed to curtail its value. Still confident in a prospect of rather low inflation, institutions can set a higher price on their holdings because, even assuming that nominal dividends henceforth rise no faster than prices, the discounted real value of the dividend stream has enormously increased.

are playing a dividend out of net cash rather than from purely national reserves it is a great deal harder to make a case for tightness. And liquidity makes an indirect impact on the dividend thinking of boards who are not actually in liquid themselves; the threat of being taken over, for cash, has exerted quite a few abnormal dividend rises in the last few weeks.

In fairness to open-handed boards of directors, it must be said that defence against being taken over is not the only reason why they might decide to increase payments this year. The reform of corporate taxes last March will have begun to reduce the problem of Advanced Corporation Tax, one of the longest-standing objections to paying out a higher proportion of earnings. As the rate of capital allowances drops, along with the mainstream tax rate, fewer companies will be able to plead that distributing their earnings is a tax-inefficient use of funds. As a much smaller slice of profits can be sheltered under allowances, the probability that ACT will remain unrelied by mainstream earnings diminishes - and so does ACT's status as a tax on dividends.

The point at which the tax system is in future most likely to weigh upon dividend policy is when companies look at the difference between their own tax rate and the average tax paid by their shareholders. It is there that old arguments about the wastefulness of distributing dividends - particularly as a prelude to asking for new money by way of rights - will continue to bite. The balance of efficiency here could in theory tip either way. A share register made up largely of supertaxed

Capital repayment

A similar argument suggests that companies whose object in life is to generate capital growth, rather than a flow of income, should offer to reward their shareholders mainly via the share price; property development companies, with little cash inflow - but large asset realisations in prospect - have a natural tendency to follow this line. At the opposite extreme, there are not a few companies that have generated cash by shrinking away from an unprofitable activity; for them it is only common sense if an uncovered dividend is used to repay equity. For the mass of companies, somewhere in between, it looks as if this year's higher dividends are being covered with a fair degree of comfort even in current cost terms (where these are still being disclosed). For 1985, even marginal growth in the economy should moderate the real dividend improvements of 5 per cent or so. Yet there are signs, like rising unit wage costs, that climbing profitability may not, after all the upheaval, have become a permanent feature of British industry. If so, it might be wiser not to forecast perpetual growth in real dividends; surely it says something about the evolution of Scottish caution that even Wood Mackenzie has now replaced its long-run assumption of zero real growth with a more optimistic 1 per cent.

DO YOU HAVE TO WORK IN THE CITY TO COME OUT ON TOP?

Advertisement for Prestel CitiService, offering financial information services to professionals and investors.

CITISERVICE HELPING YOU STAY AHEAD. Includes contact details for Woodsted House, 72 Chertsey Road, Woking, Surrey GU21 5EP.

SECTION II - COMPANIES AND MARKETS

FINANCIAL TIMES

Monday October 8 1984



RTS GROUP logo and text: 'ROLLING TRANSPORT SYSTEMS LTD', 'SERVING SHIPS, PORTS, INDUSTRY'.

CREDITS Appeal of Ecu helps Soviet deal succeed despite low margins

BY PETER MONTAGNON IN LONDON THE Soviet Union kept the Euro credit market rolling last week as the credit for Transbank, its foreign trade bank, was doubled to £1.5bn.

Swiss minister calls for more details on foreign borrowers

INFORMATION on foreign borrowers in the Swiss private-places market is still insufficient, according to Dr Otto Stich, Switzerland's Social Democratic Finance Minister, writes John Wicks in Interfax.

BONDS New delicacies to tempt over-fed investors

BY MAGGIE URRY IN LONDON THE recent flood of fixed-rate issues coming to the Eurodollar bond market seems at last to be abating. Money is still being raised, but issue managers are trying to tempt over-fed investors with different delicacies.

NEW INTERNATIONAL BOND ISSUES table with columns: Borrowers, Amount, Maturity, Av. life, Coupon, Price, Lead Manager, Offer yield, etc.

Canadian \$50,000,000 Federal Business Development Bank (Banque fédérale de développement) advertisement with logos and contact information.

Canadian \$75,000,000 International Bank for Reconstruction and Development advertisement listing various international banks and their branches.

INTERNATIONAL CAPITAL MARKETS AND COMPANIES

U.S. BONDS

Fed funds volatility brings wild price fluctuations

TRADING in the U.S. credit markets last week was once again punctuated by wild price fluctuations reflecting the recent sharp volatility of the Fed funds rate coupled with rapidly shifting market moods and perceptions.

While the markets ended the week with modest price gains, this high volatility looks set to continue for four reasons: First, an avalanche of new Treasury paper is forthcoming; second, there is continuing confusion about the Federal Reserve's current monetary policy posture; third, the Fed funds rate in the words of Dr Henry Kaufman, Salomon Brothers' chief

economist, "keeps the market guessing", and finally, there are the subject of renewed bitter debate among Wall Street economists. First, what level of funds rate is appropriate in view of the apparent easing in Fed reserve pressures reflected in lower bank discount window borrowings? And, perhaps most crucially, does the current state of the economy and behaviour of the monetary aggregates justify any further move by the Fed?

These uncertainties were fully reflected in the credit market's behaviour last week. After stumbling along at the start of the week, bond prices, buoyed by speculative purchases, picked up sharply on Thursday and Friday with the long bond

gaining more than 11 points over the two days. At the close on Friday the Treasury long bond was 1/8 higher on the week at 102 1/2 yielding 12.20 per cent.

The rally towards the close was prompted in part by another sharp decline in M1 which well by \$2.4bn in the latest week reinforcing the slow 2.2 per cent annual rate of increase for the basic money measure in the June to September period. Other factors included the banking figures which showed a sharp \$1.13bn decline in commercial and industrial loans on the books of the big New York banks, and the funds rate which - having been pushed up well over the 13 per cent level early in the week by end-quarter seasonal factors - dropped down to the 10 1/2 to 10 3/4 range by the close, without expected Fed intervention.

In the corporate debt markets prices rose by 1/2 point on medium-term issues and 1 point at the long end. Treasurers took advantage of the price improvement and a 10 to 30 basis point decline in new issue yield to launch a flood of new corporate paper.

Chrysler Financial sold \$200m of five-year extendable notes at par to yield 13.25 per cent. National Medical Enterprises offered \$100m of three-year extendable notes yielding 12.75 per cent, and Shearson/Lehman/American Express sold \$150m of 10-year senior subordinated notes at 98.6 to yield 12.5 per cent.

Other interesting issues included \$75m 25-year 9 per cent convertible debenture issue sold by Bowater Incorporated, the spin-off from the UK parent company, Wells Fargo, the West Coast banking group, said it was offering \$300m of medium-term notes with maturities ranging from one to 10 years.

One reason for the large number of corporate issues last week was the impending flood of new Treasury paper, expected to total about \$45bn in the next five weeks, which is already casting its shadow over the U.S. markets which are closed today for the Columbus Day holiday.

Paul Taylor

G & W finds buyer for Dominican sugar side

BY OUR FINANCIAL STAFF

GULF & WESTERN, the New York-based conglomerate, has reached agreement in principle to sell its sugar and related operations in Florida and the Dominican Republic to a group of investors headed by Alfonso and Jose Fanjul, the Cuban-American brothers. Terms were not disclosed.

G & W approved a plan to sell the businesses in June and took a \$140m writedown on the Dominican operations. The company is the largest private landowner and employer in the Dominican Republic, where the announcement of the planned sale caused a major controversy. Participants in the transaction will include Flo-Sun Land of Florida, various

Florida farming corporations associated with the Fanjuls and a group of G & W's Dominican executives led by Sr Carlos Morales, the chairman. G & W said the buyers would continue the operations with no significant changes in business relationships or operating personnel. The Dominican holdings include 200,000 acres of land, three hotels, a horse farm, an industrial estate, a cement factory and 65,000 head of cattle.

The company's major investment in the Dominican Republic is the La Romana sugar mill, which produced 400,000 tons of sugar last year, one-third of the country's total production. ARA Services, the U.S.-based

entering, transportation and healthcare management group, has approved a revised proposal from the company's senior managers to acquire it in a leveraged buy-out.

Under the proposal, shareholders will receive \$62 1/2 in cash and \$9.25 nominal of subordinated debentures for each share, valuing the company at \$875m. The acquiring group, headed by Mr Joseph Neuberger, ARA's chief executive, had earlier offered \$62 in cash and \$8.50 in debentures.

In July, ARA rejected a \$722m bid from a private investment group led by Mr William Siegel, former executive vice-president of operations.

Premiums up at Gruppo Generali

By Alan Friedman in Milan

GRUPPO GENERALI, the major Italian insurance group, lifted total premiums in the first half of 1984 by 15.2 per cent to L3,387.3bn (U.S.\$1.8bn). More than two thirds of total premiums were collected outside Italy.

For the whole of last year Generali's consolidated net profit was L137.8bn, an increase of 30 per cent. Generali is one of the most actively traded shares on the Milan bourse. Its closing share price on Friday was L31,720.

Divisional changes at P.K. Banken

By Frank Banken in Stockholm

PK BANKEN, Stockholm, has appointed Mr Christer Bagar, senior vice president and deputy head of the international division, as executive vice president and head of the division from January 1. From the same date Mr Sven Erik Hakansson, executive vice president and currently head of the international division, becomes head of the bank's northern region. Ms Ann Hedberg, senior vice president, has been appointed executive vice president and head of a newly-established money and capital

Government administration for Cruzat-Larrain group

BY MARY HELEN SPOONER IN SANTIAGO

THE CRUZAT-LARRAIN group, Chile's largest financial conglomerate, has signed an agreement with its creditors to turn over most of its assets, and 91.5 per cent of its shares, to be administered by a Government-appointed commission.

The commission will attempt to pay off the group's domestic debt of 78bn pesos (\$878m) by selling the shares and using revenue and profits from the assets handed over. These include two banks, oil, timber, and mining companies,

Jump in third-quarter deficit at Mitel

By Bernard Simon in Toronto

LOSSES at Mitel, the Canadian telecommunications equipment manufacturer, rose sharply to C\$10.1m (U.S.\$7.67m), or 28 cents a share, in the second quarter to August 24, from C\$3.5m, or nine cents a share, in the first quarter.

This took losses for the first half to C\$7.8m, or 79 cents a share, compared with C\$3.0m, or 21 cents a share, a year ago. Revenues reached C\$93.5m in the latest quarter, 30 per cent above the previous three months and 23 per cent higher than a year ago. Despite the higher losses in the latest quarter, Mr Terence Matthews, president and chief executive officer, said that "progress was made in the quarter... Mitel expects continuing improvements throughout the remainder of this fiscal year."

Libya to take up Fiat rights issue

BY KENNETH GOODING, MOTOR INDUSTRY CORRESPONDENT

LIBYA is to maintain its shareholding in Fiat at 13.6 per cent by taking up its entitlement in the rights issue planned by Italy's largest private group, Sig Cesar Romiti. Fiat's group managing director, said.

The rights issue is designed to raise about L760m (\$402m), which implies that Libya will pay L103.3bn for new Fiat shares.

Libya paid the equivalent of \$415m for its original shareholding in 1977, cash which helped Fiat finance its car model renewal programme at a time when the group's fortunes were at a very low ebb. Sig Romiti said in London that the original negotiations, which lasted 15 months and resulted in an agreement that

Sanlam in agreed offer for control of Messina

BY JIM JONES IN JOHANNESBURG

SANLAM, South Africa's second largest insurance group, has offered to acquire 40 per cent of the remaining ordinary capital at a price of R5 per share. The offer is being made by the investment company which controls Messina, has accepted the offer.

Sanlam owns 14.55 per cent of Messina's equity and has offered to acquire 40 per cent of the remaining ordinary capital at a price of R5 per share. The offer is being made by the investment company which controls Messina, has accepted the offer.

are in motor vehicle assembly. The company manufactures Nissan vehicles in South Africa and has a large share of the country's total vehicle market. The South African copper mining operation is unprofitable and is being kept afloat by Government support. A sharp reduction in motor vehicle sales since mid-year, obliged Messina to close last week the Nissan assembly plant for a fortnight. Further temporary closures are expected over the next 12 months.

Messina's principal interests

INTERNATIONAL APPOINTMENTS

The DUN & BRADSTREET CORP has elected Mr Arthur C. Nielsen, Jr, chairman of the executive committee of the A. C. Nielsen Company, and Mr Henry Burk, chairman and chief executive officer of A. C. Nielsen, as directors of Dun & Bradstreet. Mr Burk was also elected vice-chairman of Dun & Bradstreet. On August 29 the Nielsen Company became a wholly-owned subsidiary of Dun & Bradstreet.

Mr Robert J. Kramer has been appointed president and general manager of the marine and industrial engines and service division of the aircraft engine business group. He will succeed Mr Orville R. Beumer who has announced plans to retire. Mr Frank Leeson has been appointed the senior member of

the management board of DEUTSCHE WESTMINSTER BANK, wholly-owned subsidiary of National Westminster Bank in West Germany. He succeeds Mr Sydney Haywood who has returned to the UK. Mr Leeson was a member of the management board of Deutsche Westminster Bank.

AM INTERNATIONAL INC, Chicago, has elected four new members to its board: Mr Charles S. Arledge, senior vice president, corporate development and planning, The Signal Companies Inc; Mr Norman E. Auerbach, retired, former vice president of the program in science and technology, Massachusetts Institute of Technology.

Advertisement for Banque Francaise Du Commerce Exterieur, featuring a large 'BFCE' logo and text: 'U.S. \$600,000,000', 'Guaranteed Floating Rate Notes Due 1999', 'Unconditionally guaranteed by The Republic of France'. It lists various international banks and their branches.

Table titled 'FT INTERNATIONAL BOND SERVICE' containing columns for 'U.S. DOLLAR', 'EUROBOND TURNOVER', 'OTHER STRAIGHTS', 'FLOATING RATE NOTES', and 'CONVERTIBLE BONDS'. It lists various bond issues with their respective yields, prices, and maturities.

FINANCIAL TIMES SURVEY

Monday October 8 1984

FRANCHISING

The new generation of franchises—fast food, specialist car services and the like—is creating wealth for individual entrepreneurs and franchisors. Recent rapid growth is expected to continue.

Fast route to self-employment

By David Churchill

FRANCHISING is rapidly becoming one of the fastest growth sectors in a number of economies around the world. Annual sales of franchised companies in Britain have been increasing each year by at least 16 per cent, with total turnover next year forecast to exceed £1bn for the first time. More than 8,000 companies have been created in recent years by the franchise system, and almost 60,000 people given employment.

A great deal of new wealth being created in the country each year, most of which would be unlikely to happen without franchising, claims Mr. Brian Smith, current chairman of the British Franchise Association. "Probably franchising's biggest asset is that there is something in it for everyone."

Interest in the first ever National Franchise Exhibition, which starts next Sunday at the Kensington Exhibition Centre in West London—is running at a high level with more than 100 exhibitors and many thousands of would-be franchisees expected to attend.

Yet franchising in Britain, which for most people is typified by fast food outlets—is by no means new. Its origins go back to the late 18th century when the big brewers introduced the tied-house system by which the brewers provided the

capital for public houses in return for an agreement giving them exclusive rights to supply beer.

In the U.S., the history of franchising dates back to the end of the civil war when the Singer Sewing Machine company franchised exclusive territories to independent operators. But it was not until the turn of the century, when General Motors used independently-owned businesses to increase its distribution outlets, thus avoiding the need for additional investment, that the growth of franchising in the U.S. really began.

Business format

In Britain, the pubs, voluntary groups of grocers, and petrol stations linked to major oil companies are all examples of what are called "first generation" franchises. The newer type of franchising, such as fast food outlets and drain cleaning services, are second generation or business-format franchises, and it is this area that is showing the most growth.

If first generation franchises are included in estimating the size of the franchise sector (as they are in the U.S. where franchising accounts for 30 per cent of retail sales and 10 per cent of gross national product), the number of franchise outlets in the UK is between 80,000 and 100,000 and total sales would run into many billions.

As the Mintel market research group points out in a recent study of the market

(available from Mintel for £395), "if the population of the U.S. is compared with that of the UK, it becomes obvious that it would no longer be fair to describe the UK franchise market as being in its infancy."

There are a number of definitions of franchising in use but basically a franchise can be defined as a means of collaboration between a company which wishes to expand its trademark of its products, and an independent individual. Under the terms of the deal the collaboration is governed by a contract.

The franchisor is a manufacturer, wholesaler or retailer who grants his trademark and methods to be exploited. The franchisee is an independent trader who accepts the working principles of the franchisor.

For the franchisee, the main advantage of franchising is that he can benefit considerably from a business and clientele which is already established, while legally keeping his own independence. The franchisor, on the other hand, gains a rapid growth of his business and a faster establishment of his trademark with lower capital costs.

The franchisee usually pays over a lump sum to the franchisor with a continuing royalty, which can either be a percentage of the turnover, or a surcharge on the cost of the basic supplies. The royalty covers the cost of any further training, advice, administrative back-up and local and national advertising.

Such continuing royalty pay-



Roger Taylor

ments can be a source of irritation to many franchisees. However, Mr. Dick Crook, one of the growing number of franchise consultants, advises franchisees not to be greedy. "After all, you will want your franchisor to be prosperous and financially capable of providing his services to you on a long-term basis," he says.

The amount needed to obtain a stake in a franchise operation varies considerably—from about £5,000 or so for the simplest type of service franchise to over £300,000 for a fast food outlet in a prime location, with about £30,000 as the average start-up cost.

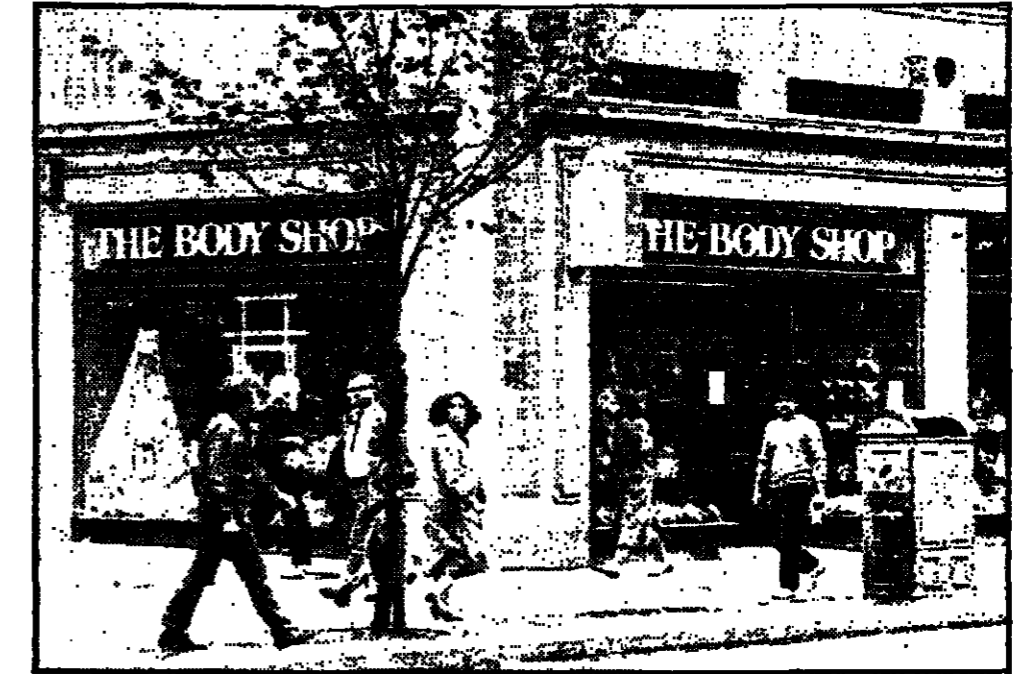
Raising the finance has been made much easier in the past few years. The major UK clearing banks—especially Barclays and National Westminster—have set up specialist departments to check out franchisors and offer financial packages for potential franchisees.

In the UK, most "home-grown" franchisors have tended to be in the service sector, such as drain cleaning, windscreen replacement and so on, while many of the well-known franchise names, such as Kentucky Fried Chicken, are American imports.

Expanding market

Retail distribution franchisees are relatively rare compared with the U.S. or Continental Europe, probably owing to the difficulties in the past in acquiring retail sites. However, UK franchise retail groups such as Frontaprint are now finding it easier to expand as the recession has brought more retail properties on to the market.

The largest growth potential lies in the wide range of retail franchises similar to those found on the Continent, many of them in well-developed for-



Left: Customer at a London Frontaprint shop, part of the fast print chain; and, right, City branch of The Body Shop, the toiletries and health care outlet. In the U.S., fast-growing sales through franchising are expected to reach \$500bn, with 5m people employed by franchising companies.

IN THIS SURVEY

The sectors: many new areas being considered	2
Franchisors: careful selection is vital	2
Licensing: firmly established part of retailing	2
The franchisee: taking first steps to success	3
Case studies: Richard Carr—burger breakthrough;	3
Agnes Gregory—maternity	3
Europe: variety of regional differences	4
The U.S.: success still breeding success	4
BFA: rapidly-developing trade association	4

hair care services."

American franchisors recently launched a trade mission to the UK and other European countries to pave the way for further U.S. expansion on this side of the Atlantic. One attraction of Europe for the Americans is the absence of strict legal controls affecting companies wanting to set up a franchise operation. There are, in fact, no legal restrictions aimed specifically at franchising in the UK, and the position is the same in many continental countries.

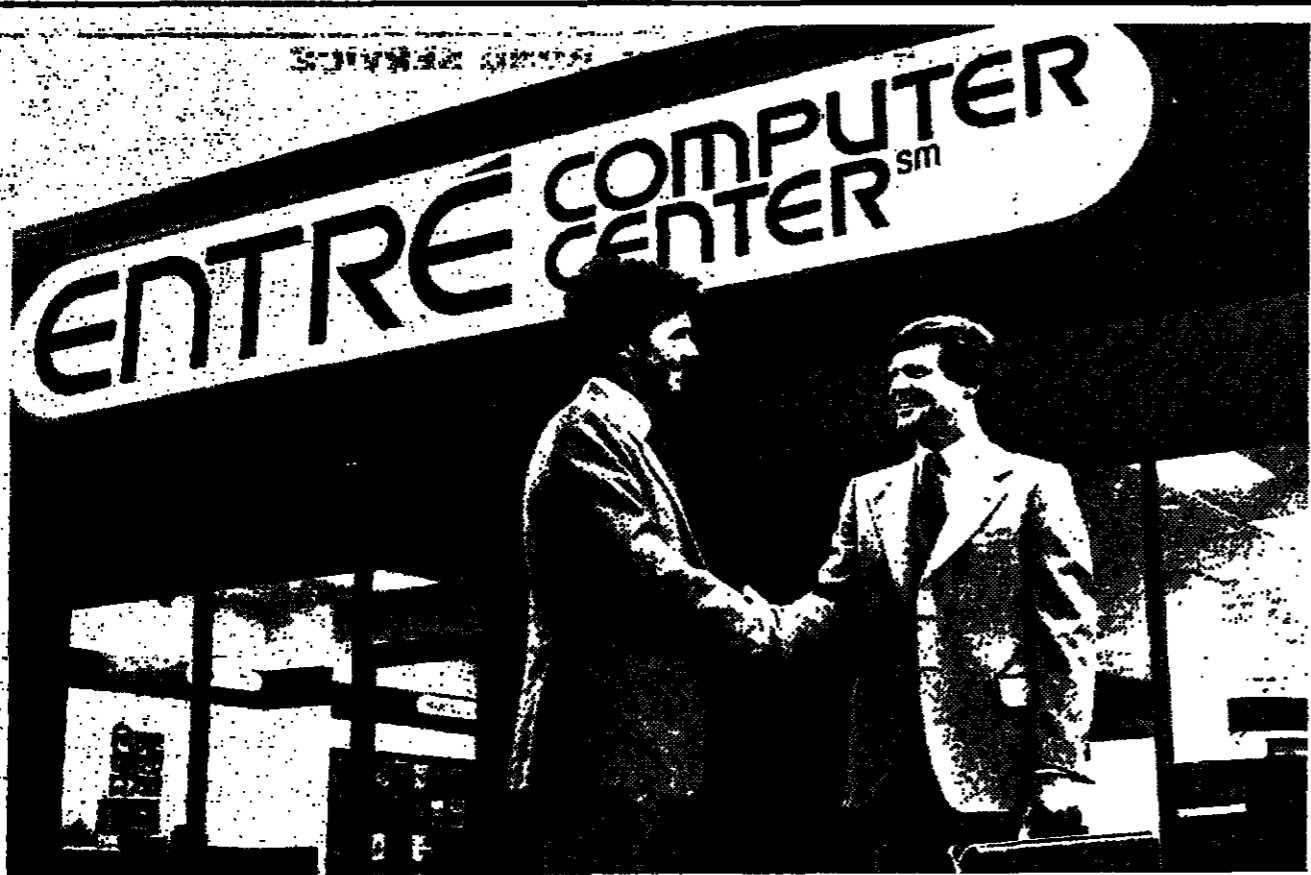
Legal controls

In Italy, while there is no specific law regulating franchising, foreign franchisors must register their trade mark in Rome, or with the relevant chamber of commerce in each region, and make contact with an Italian bank to negotiate and follow through all royalty payments. (One fast-growing Italian

franchising export to the UK is the Benetton fashion chain.)

Although the Office of Fair Trading and other UK regulatory agencies are closely monitoring the progress of franchising in Britain to ensure that no unfair trading practices develop, the British Franchise Association has managed to stave off any stronger controls by offering self-regulation. The association was formed in 1977 to help stamp out some rogue traders and to raise standards generally, as well as to promote the franchise concept in Britain.

How fast will franchising in Britain continue to grow? Mr. Tony Duffield, the association's director, says that "there is no doubt in my mind that franchising operations will expand steadily, not least because the system is a route to self-employment for many thousands of people who would otherwise require considerably more capital with which to start their own businesses."



The Greatest Growth Opportunity of the Decade... Professional Computer Retailing.

The opportunity is rare - The time is now.

After two years study of the U.K. market Entré Computer Centers, America's fastest growing franchisor of retail computer centres... with over 250 franchises... is now awarding franchises to qualified business professionals in the U.K.

Owning an Entré franchise is a substantial opportunity. And if you have a track record of sales and marketing success, plus the entrepreneurial ability to manage a multimillion pound business, then Entré could be the greatest opportunity of your professional life.

We provide a comprehensive, professional marketing programme. An approved product mix of the world's leading hardware and software. Extensive training programmes. Ongoing and dedicated Field Support. Advertising programmes, promotional programmes and tools. Plus a unique consultative systems sales

approach for profitable repeat business. You provide liquid capital of £70,000 plus additional financing - and the ability, drive, ambition and professionalism to become part of Entré's rapidly expanding worldwide Network.

If you have the professional credentials that demonstrate you're one of the best - call Fiona Samson today on Slough (0753) 31222.



For the most in personal computing. European Headquarters. 17 Bath Road, Slough, Berks. (0753) 31222.

See Entré on Stand No. 38 at the National Franchise Exhibition.

Holiday Inn® A Better Investment.

Nobody understands hotel franchising better than Holiday Inn® hotels. After all, we invented it. Holiday Inns, Inc. pioneered hotel franchising in 1952, and most of our 1,700 hotels around the world are now held under franchise. Just consider some of the advantages of investing in the world's largest hotel company:

- Holidex II® computerised reservations system, an industry first.
- The most sophisticated, massive research and marketing capabilities.
- Exacting standards of operation, guaranteed by regular review.
- The most widely recognised brand name in the industry.

Find out more by calling or writing to: Vice-President Development Europe, Holiday Inns, Inc., 80-82 Windmill Road, Brentford, Middlesex, TW8 0QM, England. Tel: London 586 8800.



Franchising 2

Finding the right people to sell your product or service is an essential first step

Careful selection vital

Franchisors
DAVID CHURCHILL

IT IS not only fed-up company executives that are jumping on the franchising bandwagon: many companies themselves are becoming increasingly keen to explore the growth opportunities offered by franchising. Over 1,000 companies a year are seeking guidance from the British Franchise Association about becoming franchisors.

The main advantages for companies of expanding through franchising are twofold. Firstly, it enables a company with a successful operation to expand more quickly than could otherwise be achieved using its own capital. Secondly, the problem of finding highly-motivated branch management is overcome by the expedient of having the "manager" work for himself as a franchisee.

In addition, the routine administrative problems which

can bedevil ordinary company-owned chains are reduced by the franchising system. The franchisor, moreover, obtains greater buying "muscle" through having an expanding number of tied outlets.

But franchising as a means of growth can also have its drawbacks. Loss of management control over franchisees can sometimes lead to harming of the national image that the franchisor is seeking to establish.

Routine

The classic example of this was the Wimpy chain which, after many years of franchising, found that its market image was slipping because of poor-quality service in some outlets. It was thus forced to buy back sites from franchisees and embark on a massive image-building campaign which included setting up company-owned "flagship" sites to show what a good Wimpy should be like. The strategy appears to have paid off, with Wimpy

achieving a much stronger image.

Other problems faced by franchisors include the franchisee feeling that success is due more to his own efforts than that of the franchisor, and this can lead to the franchisee resenting having to make regular royalty payments.

Communications can also become a problem, which can lead to conflicting objectives and less willingness by franchisees to co-operate in the running and development of the system.

"Most of these problems arise, however, when the franchisor has not selected his franchisees with sufficient care," points out Mr Peter Stern, assistant franchise manager at National Westminster Bank. "Personality, suitability for the particular franchise, family support and financial background are all important factors to be considered in this very vital area of franchise recruitment, and a franchisor delegates his selection process at his peril."

Many franchisors at a recent BFA seminar felt that their early choice of franchisees had been bad. Many were unable to resist the temptation to sign up the franchisees simply because the franchise was a new one and the franchisor wanted to get it operating, with the idea of solving potential problems later on.

Companies that are considering franchising as a means of expansion need to consider several factors. These include whether there is sufficiently large market demand for a product or service and whether it can easily be franchised.

In addition, the franchisor should consider whether or not the product or service has staying power, or whether it is just a passing fad. Would-be franchisees should be clear whether effective and simple controls can be established and whether the company itself has sufficient depth of management to recruit franchisees and to develop the franchise.

"If the answers are positive," suggests Mr Stern, "then the prospective franchisor should go forward with a pilot operation to test the market formula, prove its viability, highlight problem areas, and perfect the package by experimenting with opening hours, advertising methods and so on."

The minimum period for a pilot run should be from six to nine months, he adds, "and in many cases it would be wiser to operate several pilot schemes in tandem for 12 months or more."

While franchising reduces the cost of expansion compared with traditional methods, setting up a properly constructed franchise operation still costs

money. For example, the franchisor's costs of establishing a service franchise with a small regional network could be around £20,000, while a national chain would cost more than £100,000.

The benefits of franchising as a means of expansion have been shown by the Body Shop, which recently secured a quote on the Unlisted Securities Market. The Body Shop offers health and beauty products in a manner which emphasises nature, in contrast to the heavily promoted and packaged products from the established beauty houses. The Body Shop has 94 franchised outlets, of which 37 are in the UK.

Kennedy Brookes is another company that plans to grow through franchising. The company, which has expanded from a small hamburger outlet to include Wheeler's and Maxm's restaurants in its portfolio, intends to develop the Mario and Franco restaurants through franchising.

There are a number of other sectors and companies which are using franchising to expand into the UK market. Fresh baked cookies, for example, are a popular franchise in the UK, which is developing in the UK. United Biscuits is testing the market by opening six company-owned outlets in London as a pilot operation for an operation called "The Cookies Kitchen."

Positive

In Stoke on Trent, what is claimed as the first "drive thru" takeaway outlet was opened earlier this year under the name Campbell's Kitchen. This is based on an American concept and the Stoke operation enables 12 cars to be served without queuing, with orders turned around in two minutes. There are plans for 35 more outlets over the next four years.

The de-control of telephone sales has paved the way for a new franchise called Phone-centre which sells a range of telephones and hopes to have 100 outlets by the end of the year. Mini-photographic labs, which can develop films in an hour, are very big in the U.S. and the French company KIS International is developing the market in the UK with several major retail chains testing these labs as in-store franchises.

Other new areas for growth include franchises offering professional and semi-professional services to businesses, such as operations providing accountancy services. The Alfred Marks employment bureau is also looking at expanding through franchising in East Anglia and the South West, where it is not currently represented.



Customers at Spud-U-Like, the fast food outlet based on baked potato fillings

From fast food to photos

The Sectors
DAVID CHURCHILL

THERE ARE more than 300 franchisors operating in the UK at present and the numbers seem set to grow as more companies realise the benefits of franchising. While many new areas for franchising are being considered—such as providing professional services for businesses—most of the established franchisors operate in a handful of major sectors.

The best-known is probably the fast food business. Yet, perhaps surprisingly, many of the major companies in the sector have pulled back from wholeheartedly embracing franchising in the past few years. This is because the fast food industry has had a number of problems—not least the imposition of VAT in this year's Budget—and many companies are determined to get their formula right before expanding too fast through franchising.

McDonald's, the U.S. owned fast food chain, has so far eschewed franchising in the UK but is now planning to change this policy. The biggest UK fast-food franchisor remains the Wimpy chain, now owned by United Biscuits. Started in the UK in 1955 by J. Lyons, Wimpy entered franchising in 1957; there are now over 420 Wimpy outlets in the UK and a total of 400 worldwide.

United Biscuits bought the fast food chain in 1976 after Wimpy's market image had begun to suffer through poor control of franchisees and failure to adapt to the changing customer preference for counter rather than waitress service.

Wimpy now has some 23 com-

pany-owned counter service outlets, which it uses to test new equipment and management techniques, and generally provide an example to franchisees. UB plans to keep a core of company-owned outlets, but intends to reduce their importance by encouraging further expansion through franchised outlets.

Kentucky Fried Chicken appears to have overcome some of its marketing problems of recent years and re-established its position as the leading chain selling fried chicken. The company is to invest £80m in the UK over the next five years opening 350 more restaurants.

Spud-U-Like has been one of the most interesting new developments in recent years, offering instead of the usual hamburger or chicken, a baked potato with a variety of fillings. In 1982 the British School of Motoring acquired the franchise, and there are now some 47 outlets operating in the UK with a further seven openings planned before the end of the year. One of the advantages claimed for Spud-U-Like is that it has a lower start-up cost (around £50,000) than that for a typical hamburger franchised outlet (about £200,000).

Apart from fast food, another well-established franchise sector is that provided by car services. This sector has had its problems over the years and those cute and cuddly creatures battling it out with each other to attract customers.

Not only are department stores and chains such as British Home Stores and Littlewoods spending many millions on new store design, they are also trying to create "uniqueness" in their product ranges by adopting licensed "designer" labels.

"Licensing has shed its old image as simply producers of novelty merchandise," says Mr John Withers, a licensing consultant to major store groups in the UK. "Licensing is now firmly established within the retail industry. With the change

Budget-Rent-A-Car has established itself as number three in the car rental market worldwide through a franchise operation. Budget has over 100 outlets in the UK and has extended the type of franchisees it seeks, from motor dealers to entrepreneurs from any area. It offers a financial and accounting service to new franchisees and has available a field force of skilled managers to ensure that standards are maintained.

With some 17m cars on the road, there remains plenty of scope for growth among franchisors offering a service to motorists. Silver Shield, for example, has a major slice of the replacement windscreen market, while over the past 16 years Home Tune has established itself in car tuning with almost 250 franchised operators.

Outlets

The Mintel market research company, in a recent report on the franchise sector, points out that "where a car services franchisor has a sound business format, the franchisee can earn a reasonable living without making a fortune or, where the prospective franchisee already has a strong established business, a franchise such as Budget-Rent-A-Car can represent a profitable addition."

Retailing is another major franchise area. Booker McConnell, for example, is rapidly expanding its Holland and Barrett health foods chain through franchising—a clear example of how quickly to expand to meet booming demand. Singer, the sewing machine manufacturer, has now con-

verted its retail operations completely to franchising.

Another Booker development has been to take on a number of franchisees from Sperrings, which operates convenience stores in the south of England. The convenience store sector is expected by some analysts to show significant growth in the next few years as an alternative to the trend towards large food stores.

Other retail outlets offer a variety of services. The instant print sector continues to grow rapidly with companies such as Printaprint and Kall-Kwik. Frontaprint, moreover, is also developing as a franchising servicing operation, rather than just expanding the print chain. The holding company has purchased Poppies, a cleaning franchise, and Fudge Kitchen, a confectionery franchise, and is also helping other companies to develop retail outlets as franchised operations.

Exchange Travel, a retail travel agent and tour operator, is developing its travel agency business through co-opting existing independent agencies to Exchange Travel outlets as well as opening up new franchises.

Another different retail franchise is Fastframe, which offers instant picture framing services to the general public and business sectors.

Mintel concludes in its report that "it is certain that service shops will continue to develop and, while the market must peak out at some point, their ability to promote new business will ensure that this will be a good growth market for some time."

NATIONAL FRANCHISE EXHIBITION 84

SPIRIT OF ENTERPRISE

14th, 15th, 16th, OCTOBER 1984
SUNDAY, MONDAY 09.30 - 19.00, TUESDAY 09.30 - 19.00
KENSINGTON EXHIBITION CENTRE,
DERRY STREET, LONDON W8

Admission £4.00
SUPPORTED BY YOUR BUSINESS MAGAZINE
Information: Alison Slane, tel: 01-522 7661

Why some people who start a franchise start with a clear advantage.

There's one way to make sure the franchise you take up gets off to a flying start. Don't make a move until you've contacted NatWest.

We were the first bank to have a department devoted to the business of setting up successful franchises.

It's also the biggest department of its kind in the country.

We've developed countless different schemes for a wide variety of products and services. Enabling our management team to put together a financial package that's tailor-made for your particular needs. Whatever line of business you're thinking of.

We've also prepared a special NatWest Franchise Pack.

It contains a number of items, including a check list, designed to help you in choosing and setting up your own franchised business.

You can get your copy by filling in the coupon.

Then if you want to talk business, you'll find no one will get things moving faster.



I would like to know more about the NatWest Franchising Service.

Name _____
Address _____

Send to: Tim Knowles, Franchise Manager, National Westminster Bank PLC, Small Business Section, FREEPOST 1, London EC3B 3DE. FT1

Licensing

DAVID CHURCHILL

PRESIDENT Theodore Roosevelt can be said to be the father of the licensing industry. After all, it was he who gave permission for the Ideal Toy Company to use his name. "Teddy" as he is described in a stuffed little bear that the company was proposing to manufacture.

"Now, some 77 years later, it's hard to believe that you could say an unkind word about those cute and cuddly creatures like Mickey Mouse, Snoopy, etc," suggests Mr Keith Bales, managing director for consumer products and marketing of Walt Disney Productions.

Licensing as a modern-day industry traces its origins back to the 1930s when Disney's Mickey Mouse was first used on children's school writing pads and soft toys. From that small beginning, licensing has grown worldwide to the point where consumers spent almost \$17bn on licensed products in 1982.

In the UK, licensing is growing as an accepted part of the retail industry as store chains battle it out with each other to attract customers.

Not only are department stores and chains such as British Home Stores and Littlewoods spending many millions on new store design, they are also trying to create "uniqueness" in their product ranges by adopting licensed "designer" labels.

"Licensing has shed its old image as simply producers of novelty merchandise," says Mr John Withers, a licensing consultant to major store groups in the UK. "Licensing is now firmly established within the retail industry. With the change

to leisure wear, many new concepts emerge with the dawn of every fashion season."

Moreover, he points out that "some licensing organisations are in the process of acquiring personnel with expertise in the fashion industry." This, he maintains, "is a welcome sign in a highly volatile industry."

Successful licensing of a character involves two stages. Firstly, finding the right character to license. "It would be easy if all that were being offered were old faithfuls such as Mickey Mouse or Fred Flintstone," says Mr Bales. "But the choice is staggering broad and the challenge, risks add to the challenge."

For example, he points out that children are notoriously fickle in their tastes and that any character should also win the approval of parents who are the actual purchasers. Moreover, he highlights the dangers of a licensing involvement with a forthcoming feature film: "The movie might die after a six-week run so you are left with a competition based on the movie and offering the chance to win tickets to a film that is no more."

The second stage after finding the right character to license is to make the character work for you. Promotions, such as competitions, collectables, games, and even money-off coupons, should all relate to the character to further emphasise its tie-in with the product. As part of getting the most out of a character, consider using it in conjunction with salesforce incentive schemes and as a focal point for trade presentations," suggests Mr Bales.

Licensors often claim a royalty of up to 10 per cent for top characters, although those that seek higher fees tend not to work if the products are pushed up so that sales suffer.

One new development has been pioneered by a London company, Image Merchandising and Marketing. This company puts together ranges of merchandise which are integrated around a theme or lifestyle—such as a home furnishings range called "The House of Louis Nichols"—and then selling this to retail outlets. The company also ensures that delivery and stock control is carried out efficiently.

"LET'S CLEAN UP BRITAIN—TOGETHER"

Franchise packages from £15,000 are now available from ENVIRAFLOW, a division of London Stone. A rewarding business is offered with our unique PROVEN system, market knowledge and over 100 years' experience. For free information pack telephone (0272) 28966 or write:—

ENVIRAFLO
Weststone House, 9-11 Horton Street, Bristol BS2 0LA

Join the health boom.

Become a franchisee with Holland & Barrett, Europe's largest chain of health food stores. You can expect to make healthy profits from this rapidly growing market.

What's more, you'll get advertising and promotional support all the year round. What investment is required? Between £50,000 and £80,000 but 70% can be financed by a loan.

For more details ring or write to Ken Mullarkey, Holland & Barrett, Healthways House, 45 Station Approach, West Byfleet, Surrey, KT14 6NE. Tel: 09323 4133.

HOLLAND & BARRETT FRANCHISING

INTERNATIONAL FRANCHISE AND LICENSING RIGHTS

actively sought by substantial Middle East company Applications are invited from market leaders and established companies interested in entering this valuable market place. We have immediate requirement for master licence rights in fast-food chains, car rentals and reas of manufacturing, retail and distribution. Whatever your business we could be interested. We are one of the largest commercial financial and industrial organisations in the Middle East. Applications in the first instance should be directed to our retained Franchise Development Consultants. Attention Roy Seaman International Development Division.

HAVE YOU THOUGHT ABOUT FRANCHISING YOUR BUSINESS?

Many companies throughout the U.K. should now look towards franchising to meet their corporate goals, whether you are Manufacturer, Wholesaler or a successful business—Franchising can provide you with many advantages.

- * RAPID EXPANSION
- * TOTAL COMMITMENT
- * FRANCHISEE INVESTMENT
- * RAPID MARKET PENETRATION

We can structure your business for successful Franchise Development, then recruit the franchisees you need. Write for our free brochure about franchising from the franchisors point of view today. Attention Bill Wood UK Franchise Development Division.

CONSIDERING OWNING A FRANCHISE?

Complete newswriters free on request together with full details of our award winning publication, THE UNITED KINGDOM FRANCHISE DIRECTORY 2nd Edition 2nd Edition

Attention Franchisee Service Division.
Franchise Development Services Ltd.,
Castle House, Castle Meadow,
Norwich NR2 1PL
Telephone: (0603) 647024/5
Telex: 77267 RADCOM

EUROPE'S LARGEST FRANCHISE DEVELOPMENT ORGANISATION

WORLD-WIDE BUSINESS POTENTIAL

Dyno-Rod wishes to enter into joint venture arrangements with substantial service orientated international companies in several parts of the world. The joint venture company would introduce the range of drain, pipework and ancillary services into the chosen country or countries. Dyno-Rod is already the largest drain, sewer and pipe cleaning company in the United Kingdom and, in association with other major companies, Dyno-Rod service centres operate in Gibraltar, Bahrain, Kuwait and Singapore.

Profitable joint venture opportunities

Dyno-Rod wishes to increase its worldwide spread through joint ventures, with companies who can recognise the potential of the market and complement Dyno-Rod's expertise. Please contact: Mr. R.G. Taylor, Managing Director, DYNOROD P.L.C., 143 Maple Road, Surbiton, Surrey, KT6 4BJ.

Profit from our reputation
DYNO-ROD

SNAP UP THIS OPPORTUNITY

The introduction of Mini-Labs has revolutionised the processing of photographs. Now a "60 Minute Service" can be provided to retail customers including full quality control. Foto Inn have been pioneers in this industry for over 3 years, backed by many years' experience in photography. With a tried and tested business format using only 300 sq ft of retail space, we can launch and sustain you in this dynamic new industry (min. investment £15,000.00).

Sent for details to:
FOTO INN LTD.
12 Oxford Street, London W1M 9PL. Tel: 01-590 0434
See us at Stand 91 National Franchise Exhibition
Bring along your films for us to develop on the spot

FAST FOOD FRANCHISE SPUD U LIKE

With over 50 Baked Potato Restaurants now open or planned, SPUD U LIKE is growing fast and right now there are opportunities for people to join the franchise and share in our success. With a minimum investment of £15,000 attractive finance schemes are available to enable you to open a franchised unit. As a franchisee you benefit from initial training, ongoing support, centralised marketing and purchasing, whilst still enjoying the rewards and satisfaction of running your own business. Find out more by calling Jill Krohn on 01-965 0181. SPUD U LIKE, 36-38 Staines Road, Park Royal, London NW10 6EU.

TAKING A FRESH CLEAN LOOK AT FRANCHISING?

One of the UK's most successful retailers will be launching its franchise operation at the National Franchise Exhibition. See us on Stand 24

WILL FRANCHISING WORK FOR YOU? WE'LL GIVE YOU AN EXPERT OPINION

We are franchise experts. And we've assisted more successful franchisors than anyone in Europe. As your consultants, we'll show you where the profits are and where the pitfalls are. We set-up systems that last, systems where the legal work, the marketing work, the franchise work, the ground work, the follow-up work are done, and done right. Contact us now. Coltiam Associates. Our experience works for you. Coltiam Associates, Rothamsted, Broken Gate Lane, Denham, Uxbridge, Middlesex UB8 4LB. Tel: Denham 534200 (STD 0628)

A boom to match that on other side of Atlantic

Europe
GODFREY GOLZEN

THE DOMINANCE of franchising in American retailing, where it now accounts for a third of national turnover, is often quoted as a portent for the future of shopping in the UK. But not all American trends cross the Atlantic, so it is even more impressive to point to the fact that retail franchising on the Continent is already approaching U.S. proportions. Italian-based Benetton's turnover has risen from £27m in 1978 to £200m in 1983, from over 2,000 franchised outlets. In France, Philidar, another clothing franchise, has a similar number and in Belgium there are two supermarket franchises, each with 250 shops. In fact there are around 40 franchises in Europe with more than 100 outlets and a large number with over 50. In the UK only a handful have achieved that kind of spread. Though franchising is growing rapidly throughout Europe, it is in France where it has become most firmly established, particularly in clothing and fabric retailing. One reason for this is thought to be the geographical structure of the French market. There are few conurbations outside Paris. That makes sel-

ling to independent stores a very cumbersome and expensive operation and some French franchisees resemble a kind of wholesaler on the model of the UK's tied pubs, rather than the detailed business format which is usually worked out in this country. It also means that royalty levels are lower than in the UK. Between 3 per cent and 7 per cent seems to be about the norm and indeed some franchisors work purely on the basis of a mark-up on supplies. That is true of the best known of the French franchises to have penetrated the British market, the cosmetics firm Yves Rocher. It is also the way Benetton operates. The European franchise that has made the biggest impact is the British market, though, is the French bridal wear company Pronuptia. Its 70 shops are operated here under licence by Edward Young, whose interests originally were in hiring out men's formal wear. Pronuptia is not thought of as an imported franchise at all and in the opinion of Mr Duncan Whitfield, chairman of Home Tunes, licensing rather than direct control is the right way for this to be done in any other country. He is currently launching Home Tune in France in precisely this way. There are few contributions outside Paris. That makes sel-

Success still breeds success

United States
FRANK LIPSUS

FRANCHISING IS still growing in America, with new products such as customers stained glass windows joining the ranks of the original franchising fast-food and hotel businesses and even entering unlikely fields such as banking and business brokerage. Franchises were worth \$436m in sales in 1983, according to the U.S. Commerce Department, represented a third of American retail sales, 5m jobs and 15 per cent of the country's gross national product. In 1984, the industry expects a growth of 9 per cent over 1983—and 300 per cent in the past 15 years. The growth rate reflects the continued success of such businesses as McDonald's and Holiday Inns, but also extension of the field into more marginal businesses.

Money to be made There is of course money to be made in Edie Adams Cut and Curl, Cottman Transmission (for cars) and H and R Block income-tax preparations. But Mr Stan Luxenberg notes in his Roadside Empires, the first history of franchising, that many more franchises—like any business—fail than succeed. The major franchisors make it harder for franchisees to grow rich. When Kwik Kopy, a Houston-based franchisor, had only 150 outlets in 1975, it charged \$8,000 for a new unit, while the price tripled to \$25,000 in 1980 when the number of outlets also tripled to 470. Mr Luxenberg estimates that "saddled with royalty payments and advertising costs, more operators cannot expect to earn much more than \$25,000 a year



one on the ground who thoroughly understands local consumer preferences and habits. A method of operating that is successful in one country won't necessarily travel to another in its entirety—or at all. Mr Whitfield says that cultural and socio-economic differences are reflected in which franchises are successful in various countries. "Fast food hasn't really got anywhere in France, but in West Germany, where there's less variety, the Wienerwald restaurants have done very well." He thinks that differences in education may account for the fact that one extremely successful German franchise has not

spread here—Portas, which renovates front doors. It requires a considerable degree of skill in carpentry, which the German apprenticeship system produces to a greater degree than ours. On the other hand, Portas is expanding successfully into other EEC countries, where home maintenance is a booming franchise area. There are also regional differences to take into account. Mr Whitfield is launching Home Tune in the north-west of France. "It's still a predominantly rural country—if something doesn't work in the provinces, it won't work at all."

spending a good deal of time in France—he speaks the language fluently—he is leaving the actual setting-up of the franchise to his French licensee. He regards him as a partner, rather than as a franchisee on a larger scale, and is expecting only a modest 2 per cent royalty from the arrangement. "If the originator tries to take too much from the licensee, the balance of mutual advantages between franchisor, franchisee and customer, which is the basic principle behind franchising, can't operate."

Computerland's Manchester store, one of the company's 48 microcomputer stores in Europe, due to expand to 70 by the end of the year. The California-based corporation, founded in 1976, has stores in 12 European countries plus Israel, and about 700 stores in 24 countries worldwide.

Nothing succeeds like success

The USA's foremost professionalising service organization is looking for new associates in the UK. Applicants will receive a £25,000 capital and a desire to build their own successful business. They will receive all the backing and active support necessary to succeed. For more details, contact Alan Vaughan, Servicemaster Ltd, 50 Commercial Square, Leicester LE2 7SR, or calling 0533 548620. (Source: Franchise Magazine)

Servicemaster

PASSport to SUCCESS UK

PASS & CO have over 25 years of success in the treatment of Woodworm, Dry Rot and Rising Damp. Our clientele includes local authorities, building societies, estate agents as well as the private sector. If you are self-motivated and possess, and have the ability to effectively market a highly lucrative and rewarding service we invite you to join in the success of our company. Our comprehensive franchise package is complete with full training, all the necessary tools and equipment plus full supporting technical and marketing back-up. The system has now been fully proven by our first 50 franchisees. Several important areas still remain to be taken up and these exciting opportunities must be covered within the immediate future to enable the completion of our nationwide network. Suitable applicants with drive and determination are advised to apply without delay. Successful candidates will experience a rapid development of their territory and achieve high net earnings of approximately £14,000 in the first year rising to over £20,000 in year two. A total investment of £15,000 including working capital is required (£5,000 minimum cash investment with finance package supported by leading banks available). For full details and Brochure please contact: The Franchise Director, Pass & Co Timber Preservation (UK) Ltd. Tel: 01-539 1105 (5 lines)

PASS & CO
PASSCO HOUSE
535 HIGH ROAD,
LEYTONSTONE, E11

FRAME Instant picture framing

Fastframe is one of the most exciting new retail franchises to be launched in recent years. It combines an expert picture framing service with an attractive shop layout. Fastframe provides a total package including site selection, training, launch and ongoing group purchasing and marketing support. Min. capital investment £10,000 Total capital investment £30,000

John L. Scott, Managing Director, Fastframe Franchises Ltd, Percy St, Newcastle upon Tyne NE1 4PX. Tel: 06321 61594

FRANCHISE

As the company who first introduced Apple to the U.K., Personal Computers Ltd, London, are in the forefront of this important and expanding market. Personal Computers Ltd, are major distributors for Apple, IBM, and D.E.C. and are appointing a limited number of individuals or organisations to establish outlets in the U.K. Investment approx. £70,000. Equity finance available. Inquiries to Bryan Wilkes, Personal Computers Ltd, 218 & 220/222 Bishopsgate, London EC2M 4JS or phone 0454 32631.

Personal Computers Ltd

Shoppers love the convenience you'll love the success.

Convenience stores are one of the fastest growing sectors in U.K. retailing. Springers are the most successful company in convenience stores. A Springers franchise gives you a franchise programme devised by Europe's most successful professionals, a brand name created by Europe's most successful designers, a marketing support that creates success from day one. More important, you have a uniquely exciting business. We have a number of sites available for franchising in 1985 and 70% bank financing is available on the 200-250,000 investment. Contact us today. Mr Trustar - send me the Springers franchise kit. Name: _____ Address: _____ Contact: _____

SPRINGERS

Force for more regulated future

British Franchise Association
DAVID CHURCHILL

THE BRITISH Franchise Association is developing rapidly in line with the fast growth of the business-format franchising sector and looks set to continue to be a key force in the development of franchising in the UK. The association was formed early in 1977 to help weed out the cowboy operators who were beginning to give franchising a bad name and to establish guidelines for operators. In particular, the well-publicised pyramid selling scandals of the late 60s and early 70s did considerable damage to the public awareness of franchising, even though pyramid selling was only a tiny part of the franchise movement. The damage done, however, was enough to bring together

eight large UK franchising companies to form an association of franchisors. One of the association's first tasks was to establish a code of ethics. Mr Tony Duffield, the present director of the association, says that "the value of the code has since been proved time and time again by events and today it stands unimpaired and accepted by the industry and the country at large as the benchmark for professional, properly-constructed franchises." The 10 paragraphs of the association's code include endorsing the Advertising Standards Authority's rules on advertising ethics, and seeking to ensure that franchisees are given the fairest possible deal. Mr Duffield adds that "the establishment of the standards and the task of educating companies into the industry to ensure these standards has been one of the major tasks of the association." The association carries out a screening of new applicants for membership which covers a complete check of the franchisor's financial background, an examination of its legal agreements with franchisees, its willingness to abide by the code of ethics, and whether or not there is a successful pilot franchise already operating. The membership proposal is placed before the association's executive committee and is afterwards proposed at a quarterly council meeting. Still developing There are two membership grades: those companies with full membership that have been trading for some time and are established franchisors. Qualified non-member companies are those which are still developing their franchises but are eventually to reach full member status. From the original eight founders, the association now has over 80 members, of which 61 are full members. Many companies have emerged from the accreditation procedure a great deal wiser and better able to understand how to properly construct and operate their own franchise system," adds Mr Duffield. He took over as director of the association earlier this year after a year as chairman. He replaced Mr Tony Jacobson who

MI
FRANCHISE
AFFOR
FINANCE

Media Technology placing to raise £3m

By William Devlin

Media Technology International, which supplies technically advanced equipment and services for the film, television, theatre and professional photographic industries, plans to join the USM later this month.

Its biggest subsidiary, Joe Dunton Cameras, which accounts for roughly two-thirds of group profits, provides a rental service, mainly to film production crews requiring cameras, lenses and ancillary equipment.

The balance of the group's profits come from Lee Filters and Lee Filters Developments, which make colour control lighting filters and camera filters. Lee accounts for more than 75 per cent of the UK colour filter market, and plans to double its capacity this year to assist its overseas expansion.

The placing price has yet to be finalised, but brokers Russell Wood are planning to offer roughly 2.5m shares at between 110p and 120p. That represents 25 per cent of the total equity, which is valued at £12m assuming a 120p placing price. The company aims to raise £3m, half of which would be new capital to finance further expansion, with the balance to come from shares to be sold by the directors.

Joe Dunton has recently acquired new premises in Wembley for £1m, to replace its existing rented headquarters. Group profits declined from £546,000 pre-tax to £188,000 in the year to 1983, but have climbed steadily from £405,000 to £882,000 to £1.7m in the three years to last May.

The hiccup was caused by the late receipt of film from Lee's main supplier, which artificially shifted a disproportionate amount of costs from 1980 into 1981. Inadequate control of base material wages was also corrected, also contributing to the downturn.

Hawtal Whiting heads for USM

BY ALISON HOGAN

Hawtal Whiting, an automotive design engineering consultancy which has worked for several major car manufacturing companies, is coming to the USM with a market value of about £12.5m next week on a p/e of between 10 and 11.

Less well known than the famous car stylists Pininfarina or Giugiaro, Hawtal Whiting, established in 1970 by its three directors, concentrates on the engineering of the car rather than its appearance. The staff of more than 300 will redesign a four-door saloon into a five-door hatchback, or construct a new bumper using lighter but stronger material.

HW Structures is concerned with testing and developing prototypes, including the examining and evaluating of different materials, testing structures and estimating crash predictions. The company has worked on aircraft and further non-automotive contracts are likely.

The design and engineering division is the main part of the business which can either under-

BOARD MEETINGS

Table listing board meetings for various companies including Books Bond, Elm, Forward Technology, Harmons and Grosfield, Helens of London, Hopkinson, Jersey General Inv Trst, Lawrence (Water), Mowlem (John), Ruberoid, TDS Circuitry, UEL, Western Brothers, etc.

take concept studies into a new car or adapt an existing model to a particular market. It has also built up a business in supplying skilled staff to companies who prefer to buy in, depending in part on the timing and flow of key contracts, the company is coming through strongly in the current year fore-

Pifco expands with £10m buy

BY ALEXANDER NICOLL

Pifco Holdings, manufacturer of electrical houseware and personal care appliances, plans a substantial expansion through the acquisition of Swan Housewares from BSR International for about £10m.

BSR, the Hong Kong-based audio and electronics group chaired by Mr Bill Wylie, had previously announced its intention to sell Swan, which makes small electric appliances and cookware, because of BSR's desire to focus on the electronics industry.

Swan made a marginal pre-tax profit in 1983 on sales of £38.3m, nearly three times Pifco's sales of £12.5m in the year to April 30 1984. Pifco's own profit performance has been dis-

appointing in recent years, with the pre-tax result in the latest year, at £1.55m, only slightly up from the previous year's £1.42m. Pifco said in its recent annual report that it was adopting a new strategy of concentrating more on up-market products designed to boost turnover. Announcing the agreement in principle to buy Swan, it said it believed the purchase would improve its position in the houseware market. Swan-brand products include kettles, saucapans and toasters.

The cash purchase price is subject to adjustment after a review of Swan's net assets by accountants. Unaudited net assets at June 30, excluding properties valued at £2.5m which BSR will retain, were £10.7m.

Pifco said the acquisition will be made out of Pifco's existing cash resources and bank facilities, and is expected to be completed by the end of 1984. Earlier this year, BSR sold Swan's Goblin brand name, and its associated vacuum cleaner business, to Shop-Vac (UK).

A. J. Worthington

Mr Michael Hartland has resigned as managing director of A. J. Worthington, the Loughborough-based Staffordshire textile company. He stepped down from the chairmanship last month in favour of Mr Sidney Friedland, who had acquired a 14.9 per cent stake in the company together with Mr Jack Grant.

Johnston first half downturn to £1.6m

LOWER PRE-TAX profits, down from £1.83m to £1.59m, are reported by Johnston Group, civil and mechanical engineer, for the six months to June 30 1984. Group turnover increased by 12 per cent from £35.24m to £39.31m, and this increase was more than accounted for by the work carried out in the Turks and Caicos Islands on the contract to construct a holiday village for Club Mediterranée, on which contract virtually no profit has been taken within these figures.

Turnover on engineering was marginally below, and in civil engineering supplies marginally above that for the first six months of 1983. The engineering companies performed satisfactorily during the first half despite a continued loss in the group's North American subsidiary.

In civil engineering supplies, the roadstone activities performed well and earned good profits. The companies involved in the manufacture of concrete and Armaflo pipes have, in previous years, benefited from the high production levels and improved profit margins obtainable from substantial export orders.

It has been apparent for some time that Mr G. S. Johnston, the chairman, that the group could no longer rely on such orders, partly because of the disturbed political situation in the Middle East. It is anticipated that profits for the year will be in the range of £4m to £4.5m despite the largely non-recurring exceptional costs incurred in civil engineering and the absence of any substantial export orders for Armaflo pipes in 1983, pre-tax profits were £5.8m.

After tax down from £988,000 to £734,000 and dividends unchanged at £250,000, retained profits were £604,000 against £714,000.

Western Motor

Progress towards restoring profitability has been shown by Western Motor Holdings for the first half of 1984, with pre-tax losses considerably reduced from £440,000 to £53,000, and profits of £298,000, against losses of £31,000, at the operating level. Interest costs absorbed £404,000 (£409,000).

Conditions in the retail motor trade deteriorated in the second quarter with intense pressure on margins. Accordingly, all activities are under detailed review, and the Nissan franchise at Cheltenham is to be terminated.

Negotiations for disposal of related freehold properties have reached an advanced stage. The sale of the 40 per cent stake in the company came to £19.85m (£19.73m). There is again no dividend—the last payment was in 1980. Losses per 25p share are shown as improving to 4.8p (17.2p).

Bruntons slides

SEVERELY reduced pre-tax profits of £375,000 against £820,000 have been produced by Bruntons (Musselburgh) for the first half of 1984, and the net interim dividend has been cut from 4.25p to 1.5p. The directors say that profits for the current year will be substantially lower than the £1.1m achieved in the last full year.

FT Share Information

The following securities have been added to the FT Share Information Service: Bell Resources Ltd (Section: Oil and Gas), Osceola Hydrocarbons (Oil and Gas), Southend Stadium (Property).

Tops £3m rights for acquisition

Stockbrokers Quilter Goodison are arranging a placing of £3m worth of shares and loan stock in Tops Estates, the property group floated on the USM by the Trust of Property Shares last year.

Tops announced last week that it was to acquire Mark Rowlands, a Leeds-based property group, in a deal which would lift its net worth from £980,000 to £3.55m.

The £3.55m consideration is to be financed by a rights issue of three new 20p shares at 70p and £2 nominal of 7 1/2 per cent convertible unsecured loan stock at par for every six 20p shares.

Comet Investments, a company owned by a family interests of Mr Everard Goodman, Tops chairman, has renounced its rights in respect of 73.56 per cent of the share capital because Mr Goodman wishes to broaden the shareholder base. Trust of Property, an authorised investment trust 55 per cent owned by Mr Goodman's family, is unable to take up its rights in respect of 8.5 per cent of the Tops equity without losing its authorised investment trust status.

Quilter is placing the renounced shares and stock, including 2,168,750 shares at 70p and £1,448,000 loan stock at par. Three-quarters of the placing has been taken up by the institutions, leaving £381,459 loan stock and £42,197 shares now available to individual investors. Following the issue, 40 per cent of Tops' equity will be in public hands.

PARINGA MINING AND EXPLORATION COMPANY, P.L.C.

This advertisement is issued in compliance with the requirements of the Council of the Stock Exchange. It does not constitute an invitation to any person to subscribe for or purchase any options or shares.

TOPS ESTATES plc

(Incorporated in England under the Companies Act 1948-1980 Registered in England No. 1570543) SHARE CAPITAL Issued and to be issued fully paid £ 1,000,000 in Ordinary shares of 10p each 792,750 7 1/2 per cent Convertible Unsecured Loan Stock 1,761,666

GRANVILLE & CO. LIMITED

Member of The National Association of Security Dealers and Investment Managers 27/28 Leat Lane London EC3R 9EB Telephone 01-621 1212

MITCHELL COTTS International Engineering, Transportation and Trading 1983/84 RESULTS (unaudited)

* Improved earnings and increased dividend

Table showing financial results for Mitchell Cotts for years ended 30th June 1984 and 1983. Metrics include Turnover, Profit before Tax, Earnings per Share, and Dividend per Share.

At £10,889,000 pre-tax profits are increased by 48%. A substantial element of this improvement is attributable to profits earned in the U.K. which, as anticipated, have not attracted any significant additional taxation. Earnings per share have increased from 4.49p to 8.06p per share. U.K. profits are a product of maintained performance on the transportation side, coupled with substantial improvements in engineering with particular emphasis

on chemicals. Overseas, South Africa and Australia remain depressed. In East Africa profits from the tea estates have advanced considerably. Despite continuing economic problems in South Africa and Australia, the improved dividend should be taken as a sign of confidence in the sound strategies which have been established in recent years.

Mitchell Cotts plc, Cotts House, Camomile Street, London EC8A 7BJ. Tel: 01-283 1234. Telex: London 8814641.

Republic of Portugal Floating Rate Notes Due 1992. \$100,000,000. Merrill Lynch International Bank Limited Agent Bank.

Crédit Lyonnais Floating Rate Notes Due 1997. U.S. \$250,000,000. Credit Suisse First Boston Limited Agent Bank.

STAFFORDSHIRE China, a little piece of Staffordshire. Famous world-wide for its ceramics. North Staffordshire names the Royal Doulton, Spode, Wedgwood, Copeland, Staffordshire Pottery and others name the U.K. £120 million in exports yearly. Proving that Staffordshire is the perfect setting for business.

CAPITAL & COUNTIES PROPERTY INTERNATIONAL NV. U.S.\$25,000,000 9 per cent Guaranteed Bonds 1988 (the "Bonds").

FINANCIAL TIMES STOCK INDICES. Table showing indices for Government Secs, Fixed Interest, Industrial Ord, Gold Mines, FT-100, and FT-200 for various dates from Oct 1 to Oct 7.

LADBROKE INDEX Based on FT Index 858-862 (-2) Tel: 01-427 4411

EQUITIES

Table of equity prices for various stocks including British Bloodstock, British Waterworks, British Airways, etc.

FIXED INTEREST STOCKS

Table of fixed interest stock prices including Applied Botany, British Waterworks, Cambridge Water, etc.

"RIGHTS" OFFERS

Table of rights offers for various companies including Astra Ind, Avon Rubber, Baggott, etc.

PENDING DIVIDENDS

Table of pending dividends for various companies including Crofield, Haggard, Hawker, etc.

Table of company share prices and changes for various firms like Airspur Group, Armatage & Rhodes, etc.

Today's Rate 1% 3i Term Deposits. Deposits of £1,000-£50,000 accepted for fixed terms of 3-10 years.

Closing prices, October 5

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

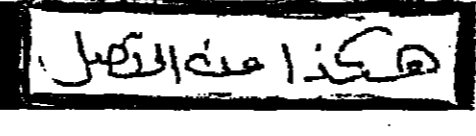
Main table containing stock prices, organized into columns with headers for 12 Month, Div. Yld., P/E, and Stock symbols. Includes sub-sections for D-D, C-C, E-E, H-H, M-M, and O-O.

Continued on Page 25

Handwritten signature or stamp at the bottom center of the page.

AMERICAN STOCK EXCHANGE COMPOSITE CLOSING PRICES

Closing prices, October 5



Main table of American Stock Exchange Composite Closing Prices, organized by sector (A-M, N-P, Q-R, S-S, T-Z).

Continued on Page 26

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

Main table of New York Stock Exchange Composite Closing Prices, organized by sector (A-M, N-P, Q-R, S-S, T-Z).

Notes and footnotes regarding dividend data and stock price fluctuations.

WORLD VALUE OF THE POUND every Tuesday in the Financial Times

WORLD STOCK MARKETS

OVER-THE-COUNTER Nasdaq national market. Closing prices, October 5

Table of over-the-counter stock prices including columns for Stock, Sales, High, Low, Last, and Change. Includes sub-sections for various market segments.

CANADA

TORONTO Closing prices October 5

Table of Canadian stock prices for Toronto, listing various companies and their closing prices.

GERMANY

1984 High Low Oct 5 Price Dm

Table of German stock prices, listing companies like AEG Telefunken and Deutsche Bank.

SWEDEN

1984 High Low Oct 5 Price Kroner

Table of Swedish stock prices, listing companies like Astra and Volvo.

JAPAN

1984 High Low Oct 6 Price Yen

Table of Japanese stock prices, listing companies like Ajinomoto and Asahi Glass.

NORWAY

1984 High Low Oct 5 Price Kroner

Table of Norwegian stock prices, listing companies like Bergens Bank and Det Norske.

AUSTRIA

1984 High Low Oct 5 Price Schilling

Table of Austrian stock prices, listing companies like Creditanstalt and Osterreichische.

BELGIUM/LUXEMBOURG

1984 High Low Oct 5 Price Franc

Table of Belgian/Luxembourg stock prices, listing companies like ARBED and Banque Paribas.

DENMARK

1984 High Low Oct 5 Price Kr.

Table of Danish stock prices, listing companies like Aarhus and Carlsberg.

NETHERLANDS

1984 High Low Oct 5 Price Gld

Table of Dutch stock prices, listing companies like AEG Holding and Alcoa.

FRANCE

1984 High Low Oct 5 Price Franc

Table of French stock prices, listing companies like Bouygues and Elf.

AUSTRALIA

1984 High Low Oct 5 Price Aust. \$

Table of Australian stock prices, listing companies like ANZ Group and BHP.

HONG KONG

1984 High Low Oct 5 Price H.K. \$

Table of Hong Kong stock prices, listing companies like Bank East Asia and Citic.

ITALY

1984 High Low Oct 5 Price Lit.

Table of Italian stock prices, listing companies like Banca Com. It. and Eni.

SINGAPORE

1984 High Low Oct 5 Price S. \$

Table of Singapore stock prices, listing companies like AEC Holdings and Anglo Siam.

SOUTH AFRICA

1984 High Low Oct 5 Price Rand

Table of South African stock prices, listing companies like Anglo American and Anglovaal.

NOTES—Prices on this page are as quoted on the individual exchanges and are not rounded prices. All prices are in U.S. dollars unless otherwise indicated.

Hand Delivery in Central Cities. Call 066-7580. EWA MALICKA. 6000 FRANKFURT/MI.

CLASSIFIED ADVERTISEMENT RATES. Effective January 3 1984. Single column 50c, Per column 1.50, 3 lines 3.00.

Commercial and Industrial Property. Residential Property. Appointments. Business, Investment. Opportunities. 8.50 33.00.

ENERGY REVIEW — every Wednesday in the Financial Times

Handwritten signature or note at the bottom of the page.

WORLD STOCK MARKETS

OVER-THE-COUNTER

Table of over-the-counter stock prices for various companies, including columns for stock name, sales, high, low, last, and change.

INSURANCE

Calculating the cost of asbestos claims

BY ERIC SHORT

ASBESTOSIS AND other asbestos related injuries in the U.S. have already turned out to be the largest natural disaster to hit world insurance and reinsurance markets.

It is estimated that there are more than 30,000 individual claims at various stages of processing and about 500 claims are being made per month.

The Corporation of Lloyd's has borne the main brunt of the costs in the London market, though much of the liability has been passed on to the reinsurers.

Asbestos has posed the most serious claims problems ever encountered by the world insurance industries.

The impact of asbestos and the effect on people unfortunate enough to have the disease has inevitably led to the problems being looked at emotionally by U.S. courts.

The courts are not only awarding very high damages to claimants, they are giving an increasingly broad interpretation of the insurer's liability and coverage of the insurance policies.

The courts' basic rule is to maximise the coverage and liability of the insurance contract.

which insurers are obligated to respond under their contracts. The effect of asbestos claims is a long time to reveal themselves in individuals — 15 to 20 years or more — compared with other dust laden diseases.

Underwriters and policy drafters at that time had no idea of what diseases existed, let alone the claims potential.

Disputes between industrial companies and their insurers over when the liability is triggered: when it comes into effect and when the insurance cover is exhausted have been somewhat acrimonious.

Drastic situations require imaginative solutions and the insurers involved hope the proposed Asbestos Claims Facility will go some way to solving the claims handling problems.

The prime motivations for creating the facility were the need to find a satisfactory means of solving the various coverage issues and a need to develop a reasonable and practical method of handling meritorious claims at a reasonable cost.

The first problem facing insurers was which policy applied for the particular claim — the policy in force when the claim was notified or the series of policies when the employee was working for the company and exposed to asbestos dust.

The Facility agreement provides insurance coverage on a defined period basis. All policies in this period can be used to determine and settle claims.

The second problem is that policies have limits of cover. These limits will apply separately to each claim, so liability is indeterminate because the number of claims is indeterminate.

The Facility agreement provides insurance coverage on a defined period basis. All policies in this period can be used to determine and settle claims.

on behalf of the insured in defence of these limits is ongoing and without limit.

The Facility agreement sets out that the insured obligation will run until cover is exhausted and the obligation will then be taken over collectively by the Facility.

The advantages of the Facility from the viewpoint of the individual insured are co-ordination of defence of claims, leading to a strengthening of defence and a reduction in excessive levels of defence costs and central handling of claims which can cut down on litigation.

The decision on whether to go ahead with the Facility is due to be taken on October 31.

The British insurance market does not so far appear to have been affected by asbestos or any other dust laden disease. A feared spate of claims related to byssinosis (caused by textile fibre dust) has not yet materialised.

BOUSTEAD INTERIM RESULTS 1984. The following is extracted from the Chairman's statement in respect of the half year ended 30th June 1984. The unaudited Group profit before tax of £20,000 is well below expectation due to a slower than anticipated rate of recovery in some of our Far Eastern operations and a loss sustained by our UK soft commodity subsidiary.

31st OCTOBER 1984 REDEMPTION TRANSALPINE FINANCE HOLDINGS S.A. US \$27,500,000 6 1/2% LOAN 1985

Transalpine Finance Holdings S.A. announces that for the redemption period ending on 31st October 1984, it has purchased and cancelled bonds of the above Loan for US \$2,200,000 nominal capital and tendered them to the Trustee.

Notice is accordingly hereby given that a drawing of bonds of the above loan took place on 21st September 1984, attended by Mr. William Brignall, Notary Public, from which date all interest thereon will cease.

Table of bond redemption numbers for Transalpine Finance Holdings S.A. 6 1/2% Loan 1985, listing bond numbers and their corresponding values.

The above bonds may be presented for payment of the proceeds of redemption at par on or after 31st October 1984 in the offices of the paying agents named on the coupons in the manner specified in Condition 5 of the Terms and Conditions of the Loan printed on the bonds. Each of these bonds when presented for redemption must bear the company dated 31st October 1984, otherwise the amount of the missing coupon will be deducted from the sum to be repaid.

NEW YORK

Table of New York stock market indices including Dow Jones, Industrial Div. Yield, and Standard & Poors.

STANDARD AND POORS

Table of Standard & Poors stock market indices including Industrial Div. Yield and Long Gov. Bond Yield.

N.Y.S.E. ALL COMMON

Table of N.Y.S.E. All Common stock market indices including Issues Traded, New Issues, and New Highs.

T. MONTREAL

Table of Montreal stock market indices including Metals & Minerals, Composite, and Montreal Portfolio.

Indices

Table of various international stock market indices including Australia, Austria, Belgium, Denmark, France, Germany, Hong Kong, Italy, Japan, Netherlands, Norway, Singapore, South Africa, Spain, Sweden, Switzerland, and World Capital Int'l.

** Saturday September 29: Japan Nikkei-Dow 10,637.16, TSE 822.73. Note value of all indices are 100 except Australia All Ordinary and Metals & Minerals All Common—50, Standard and Poors—10 and Toronto Composite and Metals—1,000. Toronto indices based 1975 and Montreal Portfolio 4/1/53. Excluding bonds, 4,000 Industrials, 5,000 Industrials plus 40 Utilities, 20 Financials and 20 Corporates. C Closed, U Unavailable.

FT UNIT TRUST INFORMATION SERVICE

AUTHORISED UNIT TRUSTS

Table listing various unit trusts such as Abbey Unit Tr. Mgrs. (a), British Group-Continued, and others, with columns for name, manager, and performance metrics.

Table listing unit trusts under the heading 'FT UNIT TRUST INFORMATION SERVICE', including entries like Britannia Group-Continued, British Group-Continued, and others.

Table listing unit trusts under the heading 'FT UNIT TRUST INFORMATION SERVICE', including entries like Britannia Group-Continued, British Group-Continued, and others.

Table listing unit trusts under the heading 'FT UNIT TRUST INFORMATION SERVICE', including entries like Britannia Group-Continued, British Group-Continued, and others.

Table listing unit trusts under the heading 'FT UNIT TRUST INFORMATION SERVICE', including entries like Britannia Group-Continued, British Group-Continued, and others.

F.T. CROSSWORD PUZZLE No. 5537

- ACROSS
1 Tug-boat? (6)
4 It is intended to contain strikers (8)
10 High-rise flat (7)
12 Conventional fare? (4)
13 Rock group that's been around for a long time (10)
15 Was abusive yet guarded? (6)
16 Do some analytical piece-work? (7)
20 Hero-whisperer (7)
21 Drink obtainable by agreement (6)
24 Fortuitous bit of scoring? (10)
26 Leaf pattern jumper (4)
28 A fishing boat that will sail with the tide (7)
29 Wild at having it turned into foreign currency (7)
30 Put out of one's mind? (8)
31 Kiths off new growth (6)
DOWN
1 A rapidly reformed man of state (8)
2 Fruitful source of information (9)
3 Quits the day before a new start is to be made (4)
5 U.S. visitors to Europe may well have come across it (8)

Crossword puzzle grid with numbered squares and some filled-in letters.

Table listing unit trusts under the heading 'FT UNIT TRUST INFORMATION SERVICE', including entries like Britannia Group-Continued, British Group-Continued, and others.

Table listing unit trusts under the heading 'FT UNIT TRUST INFORMATION SERVICE', including entries like Britannia Group-Continued, British Group-Continued, and others.

Table listing unit trusts under the heading 'FT UNIT TRUST INFORMATION SERVICE', including entries like Britannia Group-Continued, British Group-Continued, and others.

Handwritten signature or mark at the bottom center of the page.

INSURANCE, OVERSEAS & MONEY FUNDS

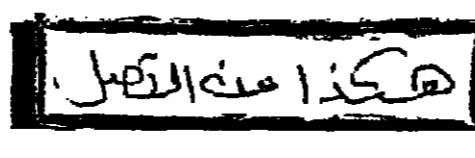


Table of financial data for various insurance and investment funds, including columns for fund names, managers, and performance metrics.

Table of financial data for various insurance and investment funds, including columns for fund names, managers, and performance metrics.

Table of financial data for various insurance and investment funds, including columns for fund names, managers, and performance metrics.

Table of financial data for various insurance and investment funds, including columns for fund names, managers, and performance metrics.

OFFSHORE AND OVERSEAS

Table of financial data for offshore and overseas investment funds, including columns for fund names, managers, and performance metrics.

Money Market Trust Funds

Table of financial data for Money Market Trust Funds, including columns for fund names and performance metrics.

Money Market Bank Accounts

Table of financial data for Money Market Bank Accounts, including columns for bank names, account types, and interest rates.

NOTES: Prices are in pence unless otherwise indicated and those denominated in US dollars are in US dollars. Yield is shown as an annual percentage rate.



Design, Construct & Engineer BUILDING SUCCESS Stratford-upon-Avon 0789 204288

BRITISH FUNDS

Table of British Funds with columns for Name, Price, and % Change.

Table of Five to Fifteen Years funds with columns for Name, Price, and % Change.

Table of Over Fifteen Years funds with columns for Name, Price, and % Change.

Table of Undated funds with columns for Name, Price, and % Change.

Table of Index-Linked funds with columns for Name, Price, and % Change.

INT. BANK AND O'SEAS GOVT STERLING ISSUES

Table of International Bank and Overseas Government Sterling Issues.

CORPORATION LOANS

Table of Corporation Loans.

COMMONWEALTH AND AFRICAN LOANS

Table of Commonwealth and African Loans.

LOANS Building Societies

Table of Loans from Building Societies.

Public Bond and Ind. Financial

FT LONDON SHARE INFORMATION SERVICE

AMERICANS

Table of American Stocks with columns for Name, Price, and % Change.

BEERS, WINES & SPIRITS

Table of Beers, Wines & Spirits with columns for Name, Price, and % Change.

CANADIANS

Table of Canadian Stocks with columns for Name, Price, and % Change.

BANKS, HP & LEASING

Table of Banks, Hire Purchase & Leasing.

DRAPERY AND STORES

Table of Drapery and Stores.

BEERS, WINES & SPIRITS

Table of Beers, Wines & Spirits.

DRAPERY & STORES—Cont.

Table of Drapery & Stores—Continued.

ELECTRICALS

Table of Electricals.

CHEMICALS, PLASTICS

Table of Chemicals, Plastics.

DRAPERY AND STORES

Table of Drapery and Stores.

DRAPERY AND STORES

Table of Drapery and Stores.

DRAPERY AND STORES

Table of Drapery and Stores.

ENGINEERING—Continued

Table of Engineering—Continued.

ENGINEERING—Continued

Table of Engineering—Continued.

ENGINEERING—Continued

Table of Engineering—Continued.

ENGINEERING—Continued

Table of Engineering—Continued.

ENGINEERING—Continued

Table of Engineering—Continued.

HOTELS—Continued

Table of Hotels—Continued.

HOTELS—Continued

Table of Hotels—Continued.

HOTELS—Continued

Table of Hotels—Continued.

HOTELS—Continued

Table of Hotels—Continued.

HOTELS—Continued

Table of Hotels—Continued.

HOTELS—Continued

Table of Hotels—Continued.

HOTELS—Continued

Table of Hotels—Continued.

HOTELS—Continued

Table of Hotels—Continued.

HOTELS—Continued

Table of Hotels—Continued.

Financial Times Monday October 8 1984

INDUSTRIALS—Continued

Table of stock prices for various industrial companies, including columns for Stock, Price, Last, Bid, Offer, and %Chg.

LEISURE—Continued

Table of stock prices for various leisure and entertainment companies.

PROPERTY—Continued

Table of stock prices for various property and real estate companies.

INVESTMENT TRUSTS—Cont.

Table of stock prices for various investment trusts.

OIL AND GAS—Continued

Table of stock prices for various oil and gas companies.

MOTORS, AIRCRAFT TRADES

Motors and Cycles

Commercial Vehicles

Components

Garages and Distributors

NEWSPAPERS, PUBLISHERS

PAPER, PRINTING ADVERTISING

INSURANCES

LEISURE

SHIPPING

SOLES AND LEATHER

SOUTH AFRICA

TEXTILES

TOBACCO

TRUSTS, FINANCE, LAND

FINANCE, LAND, ETC

OIL AND GAS

DIAMOND AND PLATINUM

MINES—Continued

Central African

Australians

Tins

Miscellaneous

PLANTATIONS

Rubbers, Palm Oil

Teas

MINES

Central Rand

Eastern Rand

Far West Rand

O.F.S.

Finance

Options—3-month call rates

Regional & Irish Stocks

Recent Issues and Rights

Notes

Plantations

Rubbers, Palm Oil

Teas

Mines

Central Rand

Eastern Rand

Far West Rand

O.F.S.

Finance

Options—3-month call rates

Regional & Irish Stocks

Recent Issues and Rights

Notes

Plantations

Rubbers, Palm Oil

Teas

Mines

Central Rand

Eastern Rand

Far West Rand

O.F.S.

Finance

Options—3-month call rates

Regional & Irish Stocks

Recent Issues and Rights

CURRENCIES, MONEY and CAPITAL MARKETS

FOREIGN EXCHANGES

LONDON				FT-SE 100 INDEX			
THREE-MONTH EURO/DOLLAR 51m				Close	High	Low	Prev
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
March	78.14	78.50	78.14	113.25	113.55	112.85	112.30
June	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Sept	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Est volume 28,275 (3,489)				Previous day's open int 10.695 (10,452)			
THREE-MONTH STERLING £250,000				U.S. TREASURY BONDS (%)			
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
March	78.14	78.50	78.14	113.25	113.55	112.85	112.30
June	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Sept	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Est volume 2,109 (979)				Previous day's open int 1.125 (1,009)			

LONDON				FT-SE 100 INDEX			
THREE-MONTH EURO/DOLLAR 51m				Close	High	Low	Prev
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
March	78.14	78.50	78.14	113.25	113.55	112.85	112.30
June	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Sept	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Est volume 2,109 (979)				Previous day's open int 1.125 (1,009)			

LONDON				FT-SE 100 INDEX			
THREE-MONTH EURO/DOLLAR 51m				Close	High	Low	Prev
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
March	78.14	78.50	78.14	113.25	113.55	112.85	112.30
June	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Sept	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Est volume 2,109 (979)				Previous day's open int 1.125 (1,009)			

LONDON				FT-SE 100 INDEX			
THREE-MONTH EURO/DOLLAR 51m				Close	High	Low	Prev
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
March	78.14	78.50	78.14	113.25	113.55	112.85	112.30
June	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Sept	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Est volume 2,109 (979)				Previous day's open int 1.125 (1,009)			

LONDON				FT-SE 100 INDEX			
THREE-MONTH EURO/DOLLAR 51m				Close	High	Low	Prev
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
March	78.14	78.50	78.14	113.25	113.55	112.85	112.30
June	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Sept	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Est volume 2,109 (979)				Previous day's open int 1.125 (1,009)			

LONDON				FT-SE 100 INDEX			
THREE-MONTH EURO/DOLLAR 51m				Close	High	Low	Prev
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
March	78.14	78.50	78.14	113.25	113.55	112.85	112.30
June	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Sept	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Dec	78.14	78.50	78.14	113.25	113.55	112.85	112.30
Est volume 2,109 (979)				Previous day's open int 1.125 (1,009)			

Awaiting developments

By COLIN MILLHAM

Central banks remained out of the foreign exchange market for the most part of last week as the dollar showed a slightly weaker trend overall, awaiting new factors and developments.

Fear of central bank intervention continued to overhang the market, and this proved a strong psychological factor preventing any attempt to push the dollar higher, but apart from small dollar sales by the German Bundesbank at the Frankfurt fixing Monday there appeared to be no other activity.

Ahead of today's Columbus Day holiday in the U.S. there was reluctance to be short of dollars on Friday, but dealers were suggesting that the dollar might fall below DM 3.00 some time this week unless the currency

received a boost from new and unexpected factors.

Short covering in a thin market ahead of the holiday weekend was responsible for the increase in demand for the dollar late Friday afternoon, taking the currency back to around the DM 3.00 level, after it had fallen to as low as DM 3.0315 earlier in the day.

A fall of 0.1 per cent to 7.4 per cent in U.S. September unemployment had an impact while the unexpectedly large drop in U.S. weekly M1 money supply of \$2.4bn was also generally disregarded.

Another factor inhibiting any further advance by the dollar was the fall in the Federal funds rate in New York to around 10 1/2 per cent from 11 per cent, although it was also felt the Federal

Reserve was unlikely to let U.S. rates fall significantly in the near future.

Sterling was little changed overall, although the exchange rate index fell quite sharply in late trading on Friday as speculation increased about a possible cut in London clearing bank base rates. The approach of tomorrow's Conservative Party conference turned attention towards arguments in favour of lower interest rates, but other factors such as the pit strike and the September money supply figures will have to be taken into account.

POUND SPOT - FORWARD AGAINST POUND

Oct 5	Day's spread	Close	One month	Three months	One year
U.S.	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
France	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Germany	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Japan	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Italy	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Spain	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Portugal	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Belgium	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Netherlands	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Denmark	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Switzerland	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Australia	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
New Zealand	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
South Africa	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Singapore	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Hong Kong	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
London	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Frankfurt	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Paris	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Berlin	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Rome	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Madrid	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Amsterdam	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Brussels	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Geneva	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Zurich	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Stockholm	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Copenhagen	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Helsinki	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Oslo	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Nairobi	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Accra	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Nairobi	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Accra	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Nairobi	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Accra	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87

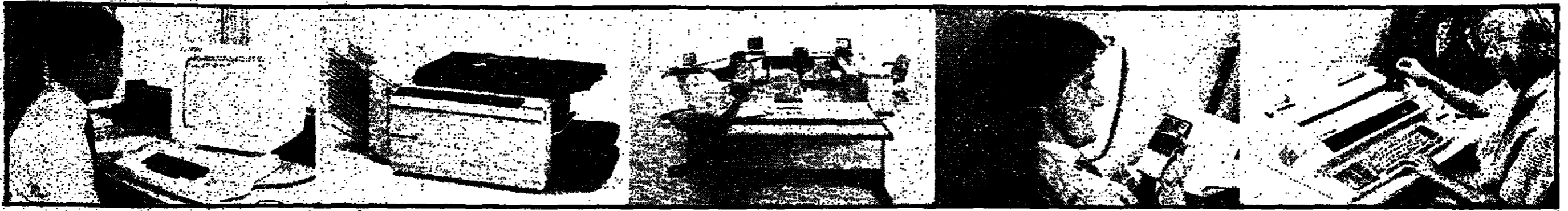
BANK OF ENGLAND TREASURY BILL TENDER

Oct 5	Day's spread	Close	One month	Three months	One year
U.S.	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
France	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Germany	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Japan	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Italy	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Spain	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Portugal	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Belgium	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Netherlands	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Denmark	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Switzerland	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Australia	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
New Zealand	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
South Africa	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Singapore	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Hong Kong	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
London	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Frankfurt	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Paris	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Berlin	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Rome	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Madrid	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Amsterdam	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Brussels	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Geneva	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Zurich	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Stockholm	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Copenhagen	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Helsinki	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Oslo	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Nairobi	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Accra	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Nairobi	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87
Accra	1.235-1.240	1.237-1.238	0.82-0.83	0.84-0.85	0.86-0.87

DOLLAR SPOT - FORWARD AGAINST DOLLAR

Oct 5	Day's spread	Close
-------	--------------	-------

FINANCIAL TIMES SURVEY



From the left: Xerox laser information system; Nasab's desk-top copier; Aronson's Genesis furniture system; Philips dictation equipment and Olympia's Mastertext electronic typewriter

Innovation abounds in all sectors

By MICHAEL WILTSHIRE

THE RATE of change is accelerating throughout the office equipment industry as businesses seek to become less labour-intensive and more automated. There is a buoyancy in almost all sections of the market which continues to spawn an ever-increasing range of new products to further the revolution in business information.

From the equipment-buyer's viewpoint, decisions are becoming ever more difficult with new products coming to the market each week as the office world undergoes its greatest upheaval since the invention of the typewriter. This radical change brings a threat for many existing products while offering scope for new ones. In short, the entire office equipment industry is technology-led—even the simple desk is now being integrated into computer-related workstations.

Earlier this year, at Hanover, some 2m visitors came to see what was new among the 1,146 exhibitors in the office and data technology sectors and noted the increasing number of Japanese companies, such as Panasonic and Ricoh, which are intent on making a strong attack on the market. Panasonic, incidentally, will be launching no fewer than ten new products in the largest display at the London show this month.

In Britain, which now has the world's second largest office equipment industry, after the U.S., the market has increased by more than 100 per cent in three years, from £2.62bn to £5.43bn.

Mr Richard Palmer, who was this year appointed director general of the British Equipment Trade Association (BETA) says that the flourishing market reflects the revolution in office administration, plus the increasing expectation of managers for more rapid information, plus the overall growth of the service industries.

Britain's business equipment industry already achieves £1.5bn a year in export sales, but Mr Palmer, who has wide experience of overseas markets, is intent on helping UK suppliers, large and small, to win greater export orders— "there's always more that can be done," he says.

BETA has just announced the appointment of the National Business Equipment Survey to provide an extensive series of marketing reports across the broad range of office equipment. A series of 30 "databank" reports are planned.

OFFICE EQUIPMENT

Many of Europe's 50m office workers are facing radical changes in business procedures as new technology opens the way for an ever-increasing range of equipment and information systems.

out of ten, machines need more people to operate and service them than fewer." And no one struggling with the tidal waves of print-outs from computers has any faith now in the paperless office theory.

Most European businesses and other offices (e.g. local government) are still ill-equipped to handle this torrent of data which has yet to reach full spate. There is too much information and it is often not properly organised—too much can be worse than too little, with executives attempting to keep up with the contentants as secretaries struggle to keep things in order.

Here is a situation, therefore, where the office equipment industry, has great scope to help both itself and others; this

applies both to products and the back-up services needed to get the best out of them.

Office equipment may be broadly divided into three categories. Some of the key opportunities in each sector are as follows:

● Office Machines: The spread of word processors is already well under way, but there is much scope for development in microcomputers that are really easy to use, say market analysts. The industry will only have fulfilled its role when the micro becomes as easy to use as the telephone. The drive to achieve this aim will present many opportunities in both hardware and software sectors.

Finding new ways to make electronic equipment simple for people to use and

better ways to connect office machines were two of the key themes at the Financial Times office automation conference in London this year.

For all the advances in electronics, the automated office of the future is still a long way off. Among Europe's estimated 10m typists, 9m still use conventional manual or electromechanical machines, rather than electronic models.

Nevertheless, spending on text processing equipment continued unabated last year, with expenditure in Europe topping £2,500m, an increase of 64 per cent over 1982—a "staggering" increase according to the latest Oasis report.

A million electronic typewriters were installed in European offices last year, pushing the installed base of these machines to 1.8m.

Europe's biggest typewriter manufacturers are becoming increasingly worried about losing their grip on their home territory. Reports suggest that by undercutting the prices of electronic typewriters by up to 40 per cent in some cases, ten major Japanese companies may have won close to half of the European market during the past three years.

Japanese producers are thought to have achieved a production capacity of 3m electronic typewriters a year, larger than the size of the world market of around 2.5m machines, said to be worth nearly \$5bn a year.

For Japanese computer-makers, one of the most obvious of the many obstacles in the office equipment field has been how to squeeze 2,000 or more language characters onto a keyboard.

For this reason, even the humble typewriter never became commonplace in Japan. But now, after 20 years' intensive research on the electronic keyboard problem, Japanese computer companies have managed to develop practical word processors for their own language—and now the door is wide open for office automation. Japan's offices now face the task of leaping directly from the age of handwriting to the age of the word processor.

The old, familiar office telephone remains at the heart of a whole range of sophisticated new equipment. But as technology is bringing radical changes, the deregulation of the telecommunications industry is increasing the options for telephone equipment and services.

IN THIS SURVEY

Changing U.S. office scene	2
Planning office automation	2
Vast range of equipment	3
Desk-top copier war	3
The typewriter market	4
Word processing systems	4
Dictation machines	4
Facsimile equipment	5
UK market turnover	5
New telephone equipment	6
Microcomputer market	6
Cable management options	6
Stationery sector boost	7
Office lighting systems	7
Employees' facilities	8
Leasing arrangements	8
Furniture systems	8, 9
Speakers' priorities	9
Microfilm market	9
Facilities managers meet	9
Exhibition diary dates	9
Office relocation	10
Rank Xerox on the move	10

\$4.3bn last year to \$6.6bn in 1988, according to the Boston-based research firm of Arthur D. Little.

The proliferation of office automation products has created an urgent need for a way to link it all together. One of the most promising methods is through local area networks (LANs). But the market for these products is still in its infancy and beset by an industry fighting over which technologies and standards are the best. Many observers nevertheless predict an explosive growth of the LAN market soon.

Then there is the highly competitive photocopier sector: whatever the manufacturers may say, anyone who works in an office knows that a large number of copiers spend a lot of time out of order.

Britain is swarming with service engineers, most of whom cannot come

CONTINUED ON PAGE 10



Do you know the secret of Canon's outstanding success in business equipment?

To give you a hint, it might be our unrivalled expertise in optics and micro-electronics. Or it could be our massive investment in Research and Development. Or a continuing emphasis on innovation in the design of our products.

All of these things have played their part, but none more than the philosophy which pervades every aspect of our business: that Canon products should satisfy the needs of their users.

And to identify those needs, we have listened to companies large and small. We have analysed their communications problems. We have paid careful attention to how we can save them time and make them more efficient.

We know how to take a hint.

That's why our range of copiers, electronic typewriters and facsimile machines covers all requirements, from the very basic right up to the most sophisticated. That's why our customers get the support of a nationwide dealer and direct service network. Because people told us what they wanted and we knew how to take a hint.

So if you can take a hint, dial 100 and ask for Freefone Canon. Or visit our Stand No. 197/199 at the London Business Equipment Show, Earls Court, October 23-26.

Canon



Official Business Machines of The Football League

Canon

BUSINESS MACHINES

Canon (UK) Ltd., Canon House, 2 Manor Road, Wallington, Surrey SM6 0AJ.

THE ELECTRONIC OFFICE:

FOLLOW OUR LEAD

In today's electronic office there's much more to furnishing than just buying tables and chairs. New and different problems that traditional solutions can't satisfy. Management and safety of wires, lighting to avoid reflections on VDU screens; control of noise and heat from machines. The Project Group have experts to help with the bewildering choice of options. From raised floors (Propafloor Ltd.) to lighting (Office Light Uplighters) through many styles of office interiors and furniture. For example in 4000 systems furniture, special channels carry wires, cables and sockets. In accordance with BS6396 (1983). And they are fitted only where required - saving unnecessary expense. Follow our lead. Take advantage of the years of research we've conducted into optimum working conditions. Send for a free copy of our guide "Programme Your Own Workstation."

PROJECT
Project Office Furniture Limited


Project Office Furniture Limited, Haverhill, Suffolk CB9 9CJ Telephone: 0440 706001 Telex: 817371
ALSO IN LONDON, BIRMINGHAM, MANCHESTER, BRIGHOUSE AND NEWCASTLE

Please send me a copy of:
 Guide to Programming Workstations
 Uplighters
 Raised Floors
 Please contact me

Name _____
 Company _____
 Address _____ Telephone _____
 Project Office Furniture, Haverhill, Suffolk CB9 9CJ

JUKI... STREETS AHEAD

Since we're new on the scene, we'd better introduce ourselves. We're a large Japanese mechanical engineering and electronics company. We make high-quality daisywheel typewriters and printers. We're not alone in that. Especially now that we're here. Juki products, however, have one very considerable advantage. Price. Feature for feature, pound for pound, our printers and typewriters are simply the most powerful and versatile on the market. They're robust, reliable and require less maintenance. They're streets ahead of the competition. We may be the latest name in information technology, but our business philosophy is as old as the hills. Roughly translated, it means outstanding value for money. Or, to put it another way, Juki means business.



JUKI 7200-2200 (Electronic Portable Typewriter)
 JUKI 6300 (Daisywheel Printer)

JUKI
Technology true to type

JUKI (EUROPE) GmbH - Elbstr. 74 - 2000 Hamburg 95 - F.R.G. - Tel: (040) 25 20 78 - Telex: 2163 66 (JUKI D) - Fax: (040) 25 20 79
 Sole distributor: **Peripherals Ltd** - 80 The Strand, Basing, Basingstoke, Hampshire RG24 0EY
 Tel: Basingstoke (0256) 3232 (12 lines) - Telex: 858649 MCRPG G - Facsimile 0256 61 570

The Hille Ergonom Group

International Furniture Manufacturers and Contractors

Hille International
Manufacturers of Contract Furniture for Airports, Boardrooms, Conference Centres, Hospitals, Lecture Halls, Offices, Schools, Stadia, Termini, Theatres.

Ergonom
Sole UK distributors of Modulo 3, Misura and Master office furniture systems, and Wilkhahn contract seating programmes.

Hille Ergonom International
Furniture exporters, International Contract Furnishers and Interior Contractors.

hille **ERGONOM**

For further information:
 Hille Ergonom Holdings Ltd., 38 Warren Street, London W1P 6PD
 Tel: 01-387-8001 Telex: 25750

Office Equipment 2

\$6bn boom for the U.S. office interiors and furnishing market

U.S. sales break all records

RECORD SALES of \$5.5bn in office furniture and furnishings are forecast for 1984 for the U.S. commercial furnishings industry. First-quarter shipments for 1984 represent a 42 per cent increase over the same period in 1983—a new record.

With even higher projections being made for 1985 at an anticipated \$6.4bn in shipments, it can be said with certainty that the office interiors market in the States is in a remarkable period of unbridled growth.

Since 1975, when the Business and Institutional Furniture Manufacturers Association (BIFFMA) of Grand Rapids, Michigan, first published its year-end sales volume report, shipments have multiplied five times from \$1.1bn.

A personal view of the budding U.S. market, gleaned from years of experience with the country's leading supplier of office furnishings, is given by Mr Fred Bell, executive vice-president, corporate development, of Steelcase, Inc. says: "We have a near industry 'sell-out'. We have seen this situation at the top of each economic cycle, where orders are being filled as quickly as furnishings are made.

"The economic base of our business in the United States is incredibly strong and we are in a real high-growth period," notes Mr Bell. Steelcase's leading position in the field is a success story that patterns the upswing in the U.S. commercial interiors market as a whole. Where 20 years ago in 1964, the company's sales were \$100m, it is now reported to have sales in excess of \$1bn.

As outlined by Mr Bell, and confirmed by other leading industry spokesmen, a list of the significant product lines contributing to the industry's prosperity would include:

- Systems, or open-plan furnishings.
- Ergonomically designed, "healthy" seating.
- Computer and office automation support furnishings (con-

sidered the fastest-growing market segment).

The systems furnishings area, so-called because it consists of modular product lines that integrate to form workstations with desk, panel partitions, storage, and often wiring management features, by far contributes the largest share to sales in the industry.

System or modular furniture, continues to be an expanding segment of the market, now making up nearly 25 per cent of industry shipments, up 2 per cent since 1983, according to BIFFMA.

Systems' growth, and that of the industry as a whole, reflects the escalating influence of electronic data processing in the office. Increases in the use of office automation require flexible office furnishings that adapt to continually changing facilities. Spending on new office equipment and furnishings is therefore expected to continue in a promising growth pattern.

As the commercial furnishings sector experiences one of its banner years, the bumper crop of office products reaching the market creates new challenges for manufacturers and end-users of product lines. Suppliers are ever more eager to carve out a larger slice of market share. Product introductions are growing more sophisticated in response to demands made

by new office technology and increasingly discriminating furnishings specifiers.

With a white-collar, professional workforce expected to capture 65 per cent of total U.S. labour in the next few years, increasing attention is being focused on capital expenditure for office interiors with an eye to boosting worker productivity.

More than half of the U.S. labour force is now employed in office work. The figure is likely to be 50 per cent by the year 2000, according to the U.S. Bureau of Labor Statistics. Total office investments are approaching \$1.5 trillion, encouraging the U.S. market to study data on the professional worker.

According to research yielded by the American Productivity Center, Houston, Texas, through a co-operative effort with Steelcase, companies which are sensitive to the positive influences of office environmental design and which have launched efforts to enhance environments and to improve operations, have demonstrated average gains of 10 per cent in effectiveness and efficiency.

Three main factors cited in the research as being responsible for worker productivity gains are human resources development, automated office systems, and environmental design. Categorized under the latter heading are effective use of systems furniture, lighting treatments, floor/wallcoverings, and temperature/air quality control.

The Steelcase/APC report notes: "As white-collar productivity becomes increasingly important, capital investment in the office will quadruple, reaching \$3,000 to \$10,000 per worker by 1988, with most money being spent on electronic equipment and task support office furniture."

Adding fuel to the productivity fire is a recently produced study from the Buffalo Organisation for Scientific and Technological Innovation (BOSTI), Buffalo, New York, directed by Michael Brill, BOSTI president. As noted by Brill: "Office productivity is 60 per cent of the U.S. gross national product and house 40m to 50m workers, as the country moves away from smokstack industry. Yet, the office environment is under-utilised and unproductive. It is chaotic in a phase of high-tech transition."

Mr Brill surveyed 6,000 workers in 70 companies prior to, and after, changes were made in their physical environment. Four facets of the environment were analysed:

- Workspace (enclosed or open-plan "systems").
- Ambient conditions (temperature, light, and noise).
- Psycho-physical factors (privacy, communication, comfort).
- Facilities management (and the degree of employee participation in decision-making).

Bottom-line measures of productivity were determined by tests of communication, environmental satisfaction, job performance, and job satisfaction.



Prudential Insurance in the U.S. uses a Steelcase open office plan with workstation panels of varying height. Steelcase is the world's largest manufacturer of office furniture, with annual sales of more than \$1bn

Not surprisingly, Mr Brill's findings disclosed that physical environment has a direct effect on job performance and satisfaction. In addition, Mr Brill notes that while tradition has proved that professional staff accrue the most benefit from environmental design improvements, all office workers are under-served in the human-factored, or ergonomic sense.

Furnishings and flexible, adaptable work environments that can accommodate change were among influences Mr Brill identified as directly affecting environmental and job satisfaction.

"An enlightened and informed approach to office design and furnishings specification

ing at Herman Miller of Zeeland, Michigan, office furnishings manufacturer, and a member of the board of directors, the Facilities Management Institute (FMI), Ann Arbor, Michigan, "the industry is becoming more sophisticated in understanding the 'fit' between people, the job they do, and the work environment.

"It used to be thought that the work environment was not especially important. Now that 85 per cent of workplaces are no longer functionally alike, we are entering a climate of raised consciousness about the need to better manage our facilities and our human resources."

While commenting that he finds the field of office furnishings manufacture to be a most fertile market, Mr Armstrong observes that, in the private sector, "there is a crying need for integration of people, place, and process. We've noticed an increase in spending among companies in the area of capital investment for the environment but have yet to see the sensitivity of corporations to the human element and needs of workers."

Environmental approaches.

Indeed, the office environment is just beginning to be addressed as a place for human interaction and dynamic exchange. In the view of a leading industry spokesman, the U.S. commercial furnishings market has matured through two phases and is engaged in a third.

In the years before 1960, furniture was manufactured for durability and maintenance; from 1960-80, aesthetics was considered key; while the 80s are centring on designing for productivity.

Fred Bell, of Steelcase, says: "The assessment of the needs of workers and environment is a real priority now."

"This is a relatively new development since the value system of the office in the U.S. has been 'status-oriented' rather than 'need-oriented'."

With the aid of such industry organisations as the FMI, mentioned earlier, the values that consider the worker will be furthered in the industry. In its fifth year, FMI is a research and consulting group that also offers educational seminars on workplace management to corporate facilities planners. A spin-off of the FMI is the International Facility Management Association (IFMA) comprised of 1,200 members.

As expressed by Dave Armstrong, vice-president of market-

Priorities for automation managers



IBM's Displaywriter: this desk-top information system has a spelling verification aid and uses a built-in electronic dictionary of 50,000 commonly-used words

while making long-term plans or more practical to aim at short-term goals.

Mr Allen Smith, manager of Los Angeles-based Atlantic Richfield, acknowledges that planning ahead and the guidance provided by a five-year view has been beneficial because it helped his company to select pilot systems and focus its efforts and energy.

"Planning ahead gave our management an idea of where we were heading even if we couldn't reach our destination straight away," says Mr Smith,

who disapproves of the "wait and see" attitude.

"Doing something about automation is valuable even without all the answers in sight," he says. "The more we learn, the quicker we can take advantage of solutions. We do not know what the technology will be like in the future, but we know that it will be very different, that the opportunities it creates will be significant, and that senior management will have to make changes to meet these challenges."

Mr John Connell, executive director of the Pasadena-based Office Technology Research Group, says that in the past many corporations initially implemented office automation in one department at a time and then gradually moved into other departments.

"Today, senior managers are realising the risks are far too great to continue in such a hit-or-miss way. To be more cost-productive they have to have a plan to measure results. Questions have to be answered about what they are trying to achieve and how they are going

to do it."

He emphasises that the key element in planning is not the equipment strategy but how the technology can serve corporate objectives and increase revenue, market share, and net income.

Mr James Carlisle, chief executive of Office of the Future, a consultancy based in Guttenberg, NJ, feels that the impact of automation can be a far-reaching "that it may seem elusive. The payoff does not come quickly. Plan to make technology the servant of business, then the pay-off will be the improvement in your competitive position," he says.

It is difficult to make long-term office automation plans that are consistent with short-term goals. As Mr Carlisle says, they must be compatible but also synergistic. Conditions change daily and plans must be tempered by practical strategies, which means moving forward step by step.

"A broad view of where you are likely to be in five years is absolutely imperative, because a one-year plan is no good without the perspective provided by a long-term outlook," says Mr Carlisle. Distinction, former office systems manager at Exxon Corporation and now a partner in Performance Strategies, New York.

CONTINUED ON NEXT PAGE.

Planning for office automation in the U.S.

MARLENE BROWN

MR DAVID KEARNS, president and chief executive of the Xerox Corporation, has one answer to the problems of the office of the future: "Automation must be managed with clear-cut goals, operating plans, business strategies, and performance plans that can be measured. All that has to come before an equipment strategy."

He recommends three priorities:

- Information managers should insist on a system plan with equipment specifications and technical objectives that meet the needs of the particular business.
- Communication as the essential goal of office automation. "Remember how people think. Their ideas come in random, unpredictable patterns. Your system should help people to generate those ideas easily and share them with others."
- Make sure that the chosen office system allows the staff to expand the scope of their work.

The pace of new development is so unpredictable that many U.S. companies ask is it worth-

Office Equipment 3

Here and on the following seven pages, correspondents examine developments in the main categories of office equipment

3,000 MODELS TO CHOOSE FROM

Today's office equipment buyer can select from 74 different categories of machine, with more than 3,000 individual models to choose from, according to Barbour-Budger's new Product Selector guide to the automated office.

Here is a selection of some of the main categories of equipment, showing the wide range of prices in each area.

Type of equipment	No. of models/machines available	Prices range from:
Micro-computers	249	£349-£37,310
Mini-computers	187	£2,425-£270,000
Electric/electronic typewriters	71	£230-£2,495
Word processors	95	£399-£28,700
Sheet folders	14	£438-£725
Visual display units	164	£110-£10,500
Tape drive units	48	£1,259-£52,300
Floppy disk drive units	59	£136-£10,370
Printers	262	£110-£100,000
Modems and acoustic couplers	152	£50-£2,900
Local area networks	49	£150-£20,000
Telephone handsets	28	£17-£12,050
Telephone call monitoring equipment	31	£50-£35,000
Telephone exchanges	25	£390-£140,000
Answering equipment	43	£78-£1,215
Telex equipment	27	£1,200-£25,000
Facsimile transmission equipment	39	£396-£9,750
Filing systems	11	£420-£4,000
Internal communications systems	20	£29-£3,500
Dictation machines, excluding centralised systems	59	£30-£750
Document copiers	142	£60-£57,800
Stencil duplicators	18	£357-£1,740
Offset duplicators	42	£2,895-£34,566
Trimmers	23	£20-£9,956
Bursters, guillotines	49	£24-£9,970
Binders	50	£45-£12,900
Shredders	89	£37-£6,757
Microfilm cameras	47	£1,115-£28,140
Microfilm duplicators	16	£1,600-£20,100
Computer-aided retrieval systems	15	£5,812-£123,000
Microfilm readers/printers	134	£35-£39,000
Mechanical letter openers	14	£18-£1,717
Mail folders	33	£395-£11,559
Labelling machines	25	£285-£32,000
Postal scales	39	£12-£3,970
Franking machines	32	£395-£5,042
Addressing machines	38	£42-£45,000

The figure of 3,000 items would be considerably increased if the product categories were extended to include more traditional and/or non-mechanical items such as furniture, chairs, seating, stationery and paper products, filing, storage items, service equipment and so on.

The desk-top copier war intensifies

Photocopier developments

ELAINE WILLIAMS

PHOTOCOPIERS have been a fact of business life for nearly 30 years since Chester Carlson developed xerography in 1950. His basic idea for reproducing perfect facsimiles has remained basically unchanged since that time.

Today the highly competitive document copying market is a multimillion pound business with more than 140 different models of copiers available, ranging in price from £80 to as much as £57,900.

New machines are coming on to the market regularly; at this year's Hannover Fair, for example, more than 20 new style copiers were unveiled.

Recent developments have been to add sophisticated features at the top end of the market and to put small machines (desk-top size) within the financial grasp of even one-man businesses.

The newest copiers have a number of special features — they are capable of enlarging and reducing, copying on both sides of the paper and on different types of paper, such as coloured or transparent

varieties, and so on. Some machines will self-diagnose and display faults, some will allow interruption of a long run without loss of copy-count, while other machines will also allocate costs to users via a monitoring device.

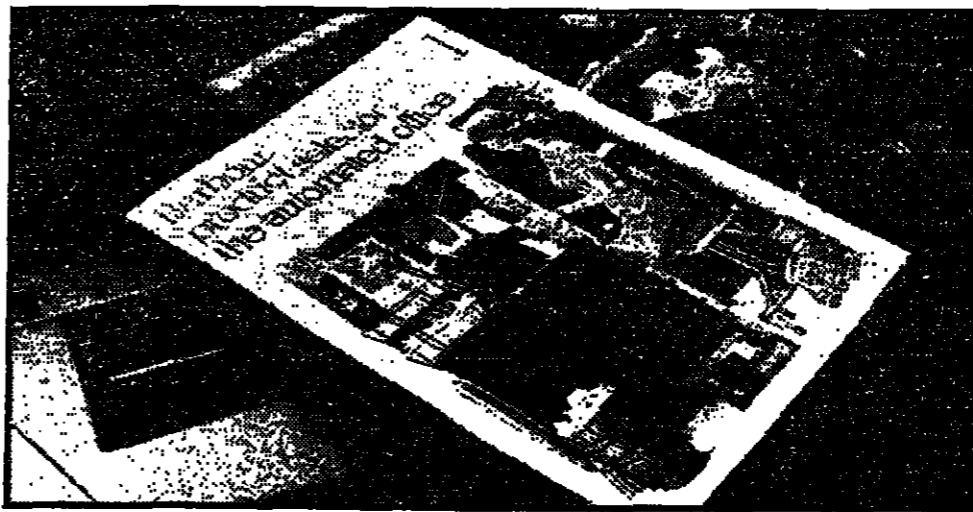
In the small machine sector, many Japanese companies have recently launched desk-top models. Among these manufacturers are Ricoh, Panasonic and NEC. This trend is likely to be the major growth area for producing a limited number of copies in small businesses.

These smaller desk-top machines have also benefited from the advances of microchip technology which is allowing photocopiers to take advantage of ever smaller silicon chips and more sophisticated technology.

One of the first manufacturers to reflect this trend was the American company, Canon. It launched its personal copier range copiers, the PC 10 and PC 20, priced initially at around £600.

Both these machines were designed to reproduce copies on non-sensitized paper, ranging from air-mail thickness to card. The machines have a floating pressure sensitive roller which automatically adjusts to paper thickness.

Canon introduced the idea of an easy-maintenance copier which had a disposable cartridge



A NEW guide to help equipment specifiers select the correct product for the automated office is now available from Barbour-Budger at £35. The 466-page catalogue lists more than 3,000 models of machine in 74 different categories.

The Product Selector No. 1 (left) aims to cover virtually all current models and supplies. To update readers, a newsletter and inquiry service is available to alert users about new developments in the fast-changing market.

The clearly-tabulated guide aims "to cut through the jungle of jargon, models and suppliers" and thus make buying decisions easier. (More details on the guide are available on 0344 884121.)

which contained a photosensitive drum, development and toner assembly and various other parts which are more likely to need replacing in time.

Photocopiers all work on similar principles. Using a lens and focusing arrangement, the image to be copied is stored temporarily on the surface of a photosensitive drum. Tiny particles of ink attach themselves to the drum which becomes electrically charged when light

falls upon it. The ink covers areas on the drum which mirror the patterns of the original. This pattern is then transferred to a plain sheet of paper as it passes over the drum. The ink is then fixed by pressure and heating.

This system even applies to top range equipment from companies such as Rank Xerox, IBM and Kodak. This end of the market is limited, probably accounting in the UK for about

10,000 units a year. Kodak is a relative newcomer to the photocopying market, having entered the fray in 1981. Now it has six models.

Kodak and Canon have just announced a link-up in copiers. Canon will supply Kodak with medium-volume machines, bearing the Kodak label and using new photoconductive materials.

At the top end of the range, photocopiers are capable of complex functions such as col-

lating and stapling copies as well as turning them out at very high speed. In fact, they are nearly a replacement for small printing shops producing limited numbers of publications.

Other major copier manufacturers, such as Xerox, have equally complicated machines. At the top end of the market, makers are aiming to produce large numbers of very high quality copies

How many years experience in business systems can our competitors boast?



The majority of our competitors in the field of business communications systems are still very much in their infancy. Which, you have to agree, puts them at a distinct disadvantage. You see, at GEC Reliance, we've been pioneering world beating technology products for well over 65 years. It's the kind of experience that's proving invaluable in a world where technology sometimes seems to be moving almost too fast for its own good. Most important of all, it's the kind of experience that shows in the way we go about things. Instead of rushing prototypes into mass production, we'd rather deliver you a product that's thoroughly tried and tested. Instead of deserting you once we've clinched a sale, you'll find we're always on hand to do a bit of hand-holding,

and sort out any teething problems. Finally, you won't encounter any language barriers when you talk to GEC Reliance. Not only will you find that we talk plain English, but the kind of English that was meant for businessmen and not technocrats. It makes even the most complicated of products very easy to grasp. If you'd like to put us to the test, then why not get in touch with us at the address or telephone number below. And we'll show you a whole range of products designed to make your office more efficient. It's the kind of proposition that should appeal to any fully grown businessman. **We've been good for business for a very long time.**

RELIANCE SYSTEMS LTD., TURNELLS MILL LANE, WELLINGBOROUGH, NORTHANTS NN8 2RB. TEL: WELLINGBOROUGH (0933) 225000. TELEX: 311492.

Planning priorities

CONTINUED FROM PREVIOUS PAGE

"By contrast, a long-term plan cannot be specific because there will be too many changes in the technology and within your corporation. But planning as far ahead as 1990 can provide a forecast and assessment of how automation might fit in with your goals," says Mr Dickinson.

Looking back on his days with Exxon, he says: "Exxon developed three plans which ranged from an aggressive, almost revolutionary, introduction to office automation to a gradual, evolutionary approach."

Striking the right balance

Mr Dean Mayer, chief of the N.D. Mayer consultancy in Ridgefield, Conn, says he likes to strike a balance between long-term and short-term planning.

He sees an office automation scheme as a long-term process of integrating systems that change and adapt from year to year. "The long-term plan could include a blueprint of the technology to be used, which would give management a sense of which tools belong where in the network," he says.

He foresees continued price reductions and continuous improvement in the processing power of desk-top machines. Automation experts have already predicted the rapid pace of change and the capital requirements and organisational support, that will be needed.

"The key to planning is in recognising that implementation must be tied to jobs," says Mr Mayer. "He knows many office automation planners who try to implement everything at once, but they're not helping users; rather they're creating ideal stream machines in their heads."

He sees no shortcuts and says that each local implementation should be treated exclusively, because each user's problem is unique, and that a company-wide general system would not tackle the real factors that make for business success.

"Long-range planning does not deserve priority over immediate plans because the information staff exists to serve the business and worry about the quality of the technology. I encourage planners to go out and be useful, to get things moving, and to focus on integrating systems only after momentum has been built."

Many would agree that the logic guiding new products on to the market is unpredictable because it reflects the sellers' marketing strategies. "Making precise long-term plans is impossible. It is like developing a strategy around someone else's strategy," says Mr Robert Becker, chairman of Raback, a consultancy in Montclair, N.J. "Similarly, information systems goals have to accord with business goals because a com-

pany's future cannot be easily defined."

He warns that widespread dissemination of information can cause problems and technological planning must therefore lead to an examination of the kind of information and the ability of the accessor to interpret it.

Another problem, says Mr Becker, is performance, which can be evaluated differently in varying types of company. Manufacturers, for example, make decisions that consider the differences between machines and personality differences between operators.

Standard data bases do not take account of that aspect. "Many information systems professionals are too analytical, which may suit the finance department when dealing with operations people, materials and machines."

It is generally agreed that information systems executives will have to assume more direct responsibility for corporate profits and that office automation will have to become a more integral part of the operation and less of a service. It will also have to be considered less as a contributor to productivity and more as a contributor to each department's profits. All department managers will become more involved in automation planning.

Companies like Corning Glass Works, NY, say they are able to deal with whatever changes the future may bring. Mr John Parker, Corning's director of information services, regards office automation as a process. "It's not very realistic to assemble a long-term plan and certainly not if the plan specifies how many systems will be used by how many users for what tasks five years from now," he says.

The way to reap full rewards

E. I. Du Pont de Nemours, based in Wilmington, Delaware, was relatively cautious when it tried to introduce three pilot projects over the past two years. Mr Raymond E. Cairns Jr, managing director of information systems at Du Pont, has had experience of implementing systems in groups of fewer than 100 people.

"This allows us to explore the technical aspects of automation and to get a better understanding of its advantages and limitations," says Mr Cairns. "When we gain more experience from these pilots we will start planning as far ahead as three years but now we are looking toward horizons a year or 15 months away."

Mr Cairns believes that senior management support is essential in implementing systems. Managers must see that automation can help them and their people to work faster and better. Only then will they be willing to dedicate the resources necessary and reap the full rewards of training.

Office Equipment 4

Sales of conventional mechanical typewriters decline sharply as users switch to electronic machines

Big demand for electronic models

WHEN THE word-processor first began to make an impact in the early 1970s it was widely predicted that the days of the typewriter were numbered.

Who would want to be without the editing and text manipulation facilities of word-processing?

Due to a combination of "technology fear," cost, and secretarial bafflement, the word-processing take-over was less than complete. Meanwhile, the typewriter manufacturers of Europe began flexing their muscles.

The result was that, from nothing in 1973, European expenditure on electronic typewriters rose to about one-third of the total expenditure on all text-production equipment in offices last year.

Basically, secretaries stayed with what they knew, as conventional mechanical and electrical machines to the business community, however, have reduced sharply.

Sales of conventional mechanical and electrical machines to the business community, however, have reduced sharply.

Functions

In the simplest electronic typewriters, functions previously performed by moving mechanical components, apart from the impact impression on the paper, are carried out by electronics. The keys become electrical switches which tell the print head what to do via logic circuits.

In most instances the print-head is a "daisy wheel"—a 3-in diameter segmented wheel with characters embossed at the end of the narrow plastic segments or "petals." On instructions from the keys, the rotating wheel stops at the proper place and a hammer strikes the character to make an impression on the paper through an ink ribbon.

Most of these machines have only small memories called buffer stores which permit continuous typing without waiting for carriage returns. Prices range from about £300.

From the manufacturing point of view, assembly is less labour-intensive, tending to keep prices down, while the user is offered reliability at least as good as with conventional machines.

More expensive machines (from about £500), apart from providing such facilities as automatic centring and under-

Typewriters

GEORFFREY CHARLISH

lining, also offer limited editing of the line being typed. Often a "thin window" display of one or two lines is provided.

At the top end of the market are machines that can cost over £1,000. They have more automation of the composition functions and enough memory to store a number of complete pages of text.

It thus becomes possible to edit documents after they have been typed out. Some machines have exchangeable memories to allow work to continue while the last draft is being approved.

At this upper end of the market the machines are approaching the level of word-processing. Indeed, some makers are offering the necessary missing elements—software, processor, screen and floppy-disk bulk storage—in an "upgrade box" which converts the typewriter into a full-blown word-processor.

These upgrades fulfil a need often felt by users once they have learned about word-processing from elsewhere. Within three or four years IBM and its once prestigious "golf ball" machine have faded from the European typewriter market. Perhaps the company was wrong-footed, believing that the future was in word-processing, or possibly it took a simple corporate decision to stay out of this particular segment for the present.

In any event, according to market researcher Keith Wharton,* Olivetti sold 28 per cent of the electronic typewriters in the UK in 1983 (some 40,000 units); Olympia 24 per cent, and Triumph Adler 16 per cent.

That these three concerns have been battling, and keeping prices down, is no bad thing because the Japanese makers—Canon, Brother, Silver Reed—have been mounting major assaults with good, inexpensive products. There will be some fierce competition at the lower

end of the market, probably with chain-store retailing and heavy discounting.

At the upper end of the business, however, there is a growing confusion for intending users because sophisticated typewriters, low-end word-processors and personal computers (PC) all seem to offer similar word-processing facilities.

For example, the electronic typewriter, with an upgrade box (an attractive growth path) has similar facilities to a stand-alone word-processor. On the other hand, some observers see such word-processors suffering at the hands of the personal computer equipped with word-processing software.

Personal computers are increasing rapidly and the software offered for word-processing is fast approaching the standard offered by dedicated word-processors.

It seems likely that as the office word becomes more and more familiar with the screen and keyboard, and as secretaries are required to perform electronic mailing and other screen-based functions, the future of the electronic typewriter as such must be a little doubtful, in larger companies at any rate.

On the other hand, many organisations are still replacing conventional typewriters with electronic models. It is estimated that of the 10m typists in Europe 9m are still using manual or electromechanical machines. In the U.S., researchers Frost and Sullivan forecast a market growth of 50 per cent a year up to 1988, by which time the electronic typewriter market in the U.S. will have reached \$4.2bn.

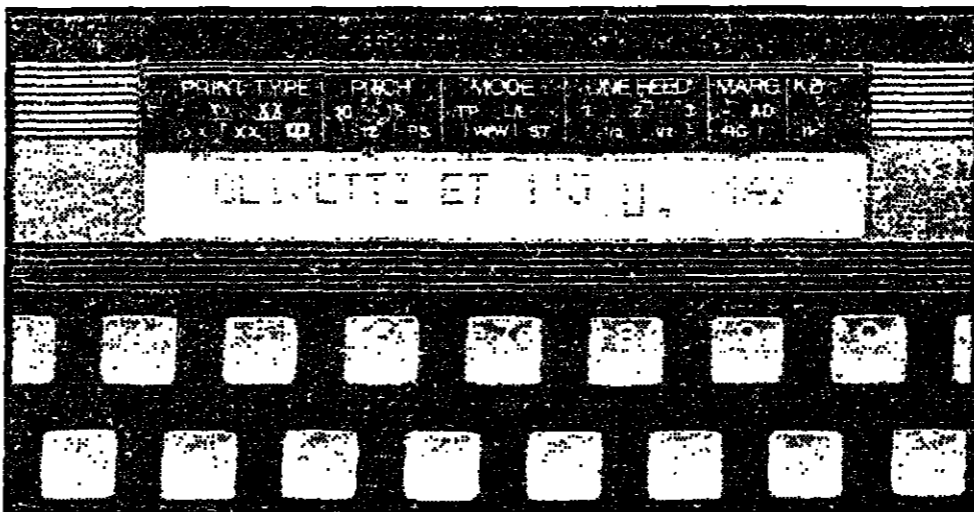
Facilities

According to this report,** stand-alone word-processors have peaked in popularity and by 1988 sales will have declined to \$183m from their 1983 level of \$897m.

But the fact remains that in real terms the cost of electronic machines is probably to fall, while the facilities it can offer are always improving. In the long run the screen and keyboard may well prevail.

*Office Automation Systems Information Service, Keith Wharton Consultants, Richmond on Thames, Surrey (01-490 7366).

**The Low End Word Processor Market, Frost and Sullivan, London (01-498 8377).



The Olivetti ET 115 electronic typewriter's keyboard, showing the liquid crystal display

The choice becomes more complex

A FEW years ago, buying a word processing (WP) system was a relatively simple matter, compared to today's situation.

A buyer dealt with a specialist WP company and for larger applications bought a shared resources system in which up to a dozen or so screen/keyboard terminals shared a minicomputer, hard and soft disc stores and one or more printers.

For a smaller commitment, he could consider the alternative of desk-top stand alone machines bought individually for users as the need arose.

Indeed, both types are still important elements in the market, but the specialist makers are having a harder time because the stand-alone desk top personal computer (PC), originated by a different group of companies for more general business computing by individuals, can obviously be programmed for WP as well.

Meanwhile, the typewriter industry was responding with electronic machines offering, in the more expensive models, word processing functions that were perfectly adequate for thousands of small business offices.

More recently, upgrade boxes for typewriters have appeared containing a screen and floppy disk store that transforms the

Word processing systems

GEORFFREY CHARLISH

machine into a full-scale word processor.

This add-on move by the typewriter companies was not unexpected. Not only is it a useful upgrade path from typing to WP, but text manufacturers (primarily Olivetti, Olympia and Triumph Adler), the screen and keyboard with memory constitutes an entry point to the next office "revolution"—the networking of terminals for data and text communication, including electronic mail.

In the UK, IBM has the biggest installed base of word processors according to the OASIS office automation survey published by Keith Wharton. It also topped the 1983 sales league by installing 3,000 Displaywriters and 200 workstation for the 5,520 shared resource system.

ICL also sold 3,000 systems, while Wang did well, having become the dominant share of the system supplier—it has some two-thirds of the UK market. In 1983, Digital Equipment (DEC) made a sudden surge, with refined software and a dealer count that now tops 100 in the UK.

There is no doubt that companies such as IBM, ICL, DEC and Wang, with significant general computing customer bases, can successfully promote WP as part of overall computing deals. With their massive marketing programmes embracing communications, they are also better able to discuss networking. And they have rather more flexibility when it comes to price battles.

So far, the Japanese have had no significant impact in this



The Wordplex 8000 integrated office system supports up to 24 terminals and 24 printers

sector in Europe, largely because they have no developed home market, which, in turn, is due to the nature of written Japanese. Exported, boxed products, such as typewriters with European-style keyboards, are one thing, but word processing, and the support it needs, is another.

Example

The choice of a word processing system has become a complex matter. Clearly, the starting point must be careful measurement of the present typing throughput and an estimate of the likely growth. Sufficient work load may well indicate a shared resource system, in which case the advantage of simpler operation for the user will be obtained at the same time.

Much depends on the type of work involved. For example, in an office where each typed letter is usually quite different from the last, an electronic typewriter may be the best purchase—for the typical director's secretary, for example.

WP tends to come into its own when larger numbers of documents are typed that con-

The growing army of office workers

There are now more than 50m office workers in Europe. West Germany leads with 18.5m; other figures are: France, 9m; Italy, 8m; Spain, 5.2m; Netherlands, 2.6m; Norway, 1.3m; Belgium, 1.8m; Sweden, 1.5m; Denmark, 900,000.

Just under half of Britain's workforce may be classified as office workers: a total of 16.4m out of a total workforce of 22.5m*.

	Total workforce m	Office workers as % of total m	Office workers m
Self-employed	2.3	70	1.6
Employees, manufacturing industry	5.4	30	1.6
Employees, agriculture, mining, construction and public utilities	2.0	15	0.3
Transport and communications	1.3	22	0.3
Distributive trades	2.7	20	0.5
Other services	7.3	70	5.1
Other public employment	1.5	63	1.0
Totals	22.5	46	10.4

* Figures for March 1983. The total does not include the armed forces.

The self-employed figures includes the self-employed who are also employers. The 70 per cent estimate of office workers does not imply that nearly three-quarters of the category are in clerical jobs, it is simply a reflection of the fact that most self-employed people have to keep books and other records and therefore need some type of office facilities. The "black economy" self-employed are not included in the figures.

*Other services includes education.

Source: UK figures from Office Equipment Digest. Other data from Wharton Information Systems.

EUROPEAN TEXT PROCESSING REVENUES

Text processing revenues in \$m for 10 European countries over a four-year period to the end of 1983; the figures include revenues for electronic typewriters, word processors and personal computers dedicated to word processing:

West Germany	763.1
UK	454.1
France	451.0
Italy	391.0
Netherlands	186.8
Sweden	133.5
Spain	87.4
Belgium	87.8
Norway	66.2
Denmark	77.6
Total	\$2,728m

Source: Wharton Information Systems

form. Only then is it "typed," straight out of the computer memory.

But software is all important in this kind of application because an executive with his own PC for example, running a WP program, is likely to become irritated with having to remember strings of keystrokes to produce simple results—and then having to wait several seconds for something to happen.

This is where dedicated word processing has scored, often requiring single keystrokes with named keys for complex editing functions.

But PC software is improving all the time and the PC has the advantage that other work can be carried out on it.

There are some industry observers who believe that the dedicated WP is on a losing wicket and that the demand in the office environment will be for multifunction workstations, connected by networks to similar terminals elsewhere in the building and in other parts of the world. A recent major announcement by Logica bears this out, and most of the computer companies have similar offerings or ideas.

But of all the things that can be done with a screen and keyboard in an office, word processing is still the most important for the largest numbers of staff.

RICOH-FROM DESKTOP TO PRINT SHOP



Choose Ricoh and you can be confident about your copying. Since 1976 Ricoh has been the world's biggest copier manufacturer.

Now an expanded range with new machines covers the whole spectrum of office reprographics, including offset print. All made by Ricoh.

You can choose the compact M10 B4 mini copier, or the top-range FT8080 for high speed systems copying. Between those two models are twelve others with features and options guaranteed to give you exactly what you need for specific copying applications.

Success is a Ricoh habit, whether it's cameras, laser technology, ink-jet printing or semiconductor chip manufacture. In Japan, that success has been recognised by the award of two rare and coveted Deming Prizes for total quality control.

In Britain, success in the vital area of after-sales service was confirmed this year when Ricoh topped an independent poll of users — against copiers from 14 other suppliers.

When you need a new copier, choose experience, quality, service and success: choose Ricoh with confidence.

Ricoh UK Limited, FREEPOST, Ricoh House, 32 Stephenson Way, London NW1 2HD. Telephone: 01-388 3200

FTS070 With the FTS070 you can zoom to any reproduction ratio from a quarter of your original size up to double; make A3 or A4 double-sided copies automatically and solve bottlenecks with 35 copies a minute output. Picture shows 1,000-sheet paper tray, automatic document feed and 15-bin sorter options.

Tell me all about the new expanded range of Ricoh copiers.

Name _____ Position _____
Company _____
Address _____
Tel _____

RICOH

technology with a human touch

Ricoh UK Limited, FREEPOST, Ricoh House, 32 Stephenson Way, London NW1 2HD Telephone 01-388 3200

Lively market for portable machines

Dictation equipment

MICHAEL WILTSHIRE

THE market for dictation equipment grew by 13 per cent in the UK last year and the long-term future for items such as pocket memos and portable dictation machines is "very bright," according to Philips Business Systems, which dominates that section of the market.

The dictation equipment sector is divided into two main areas:

● Self-contained recorders (either desk-top or hand-held) users are buying around 350,000 units a year in Britain; 200,000 of these through business equipment outlets and direct sales and the rest through high street outlets.

● Centralised systems, used mainly by larger companies, enable multiple authors to gain access, via internal or external telephone, to a "pool" of typists. Manufacturers in this sector include Dictaphone, Assman, Philips, Harris (formerly Lanier), Sony and Williams. There are four formats of

equipment: the standard audio cassette; the mini-cassette developed by Philips; the micro-cassette, which is growing steadily more popular; and the Grundig system.

Among the supporters of the mini-cassette are Dictaphone, Olympia and Sanyo (which also sells standard and mini-cassette models).

Philips leads the market with more than 50 per cent of dictation equipment in the UK, according to a Euromonitor report. Sales of table-top equipment and hand-held machines are about equal at 30 per cent each by market volume, while hand-held note-takers command about 40 per cent of the market.

The total UK market was around £33.5m last year and could reach £36.5m by 1985. Users are buying around 350,000 units a year in Britain; 200,000 of these through business equipment outlets and direct sales and the rest through high street outlets.

Philips still firmly maintains that the mini-cassette, which was specifically designed as a dictation medium, will remain the basis for all future Philips dictation machines. Mr Robin Hayward, general manager of Philips Desk Equipment, comments: "The mini-cassette more than adequately fulfils its role. The alternative micro-cassette would seem to offer no advantage



A visual "read and find" index facility is a feature of Philips' System 800 dictation equipment. The method allows authors to provide their secretaries with an immediate visual reference to the contents of the mini-cassette. Desk top and pocket

memo recorders generate both electronic and visual marks on the cassette to indicate end of letter and special instructions. Philips says that its Hi-Q sound reproduction facility marks a significant advance in dictation equipment sound quality.

age, rather than the perceived one of tape length (60 minutes). "But we believe that a 60-minute tape full of dictation is a disadvantage, as the secretary would then be faced with transcribing about 15 A4 pages of text."

The company is extending the capabilities of its recently-launched 460 centralised system by adding a "dictation management system"—a sophisticated computing unit, designed to provide supervisory functions and further extend the 460's data storage facility. Philips hopes

that the system will appeal not only to large and medium-size companies, but also smaller organisations which have so far not considered centralised dictation systems.

Dictaphone dominates the centralised dictation sector and claims around 35 per cent of the market, selling mostly directly, with only a limited operation through dealers.

Dictaphone is concentrating sales on its versatile 1285 small workstation centralised system, which is intended primarily for groups of around six dictators and two or three secretaries.

BUSINESS EQUIPMENT SECTOR IN THE UK

Area of business	Turnover	Exports	Number of employees
Computers, data and word processing equipment	£2,665m	£1,635m	56,499
Office machines	£1,132m	£414.2m	25,850
Forms and filing equipment	£448.2m	£106.7m	11,850
Furniture	£194.6m	£30.4m	6,850
Total	£4,439.8m	£1,582.7m	101,050

Source: British Equipment Trade Association, London.

Turnover up by 100% in three years

TURNOVER by Britain's business equipment industry increased by more than 100 per cent in three years, according to a survey this year by the British Equipment Trade Association (BETA). The survey, based on the 1983 figures, was carried out among the 200 members and associates of BETA, which includes the major multi-nationals as well as comparatively small organisations in the business equipment sector.

Turnover increased by 107.5 per cent from £2,623m to £5,439.8m. Exports rose from £1,582.7m to £1,582.7m—a rise of 21.5 per cent. The number of people employed in the

sector has increased from around 70,000 to 101,050 over the three-year period.

The association divides turnover into four main areas (computers, data and word processing equipment; office machines; forms and filing equipment; and office furniture), although it is recognised that there are ever-increasing grey areas within the industry where technological advances make it difficult to define, with complete clarity, when-for example—a typewriter becomes a word processor or when a desk system becomes a workstation.

MICHAEL WILTSHIRE

New applications give market a boost

FACSIMILE is one aspect of business equipment which is likely to grow over the next few years. Facsimile machines have similarities with photocopyers in that they are intended to produce a near-perfect copy of an original document. The major difference is that facsimile machines transmit the coded form of the original material over the telephone network so that the copy can appear anywhere in the world.

Until recently facsimile equipment has had limited applications. The main applications have been in the publishing world, in police forces for the transmission of copies of fingerprints, and by weather bureaux for the transmission of weather report maps.

Industry and commerce are now becoming aware of the potential for facsimile in the electronic office of the future. Developments in facsimile are leading towards machines which can be integrated into computer systems and office photocopyers, for example. "A few years ago facsimile was a fairly dull business," admits Mr Derek Arnold, assistant general manager of NEC's business systems division in the UK.

British Telecom, along with some other telecommunications authorities, notably Norway and Sweden, are making efforts to promote the technology. NEC, for example, has just received an order for more than 150 of

its Nefax 4500 from BT for its public Bureaufax system. It has been the Japanese who have taken the greatest technological strides. The reason is the ideographic alphabet which is difficult to transmit over telex and other keyboard systems. Today, there are about 80,000 machines in Western Europe. Britain has an estimated 27,000 to 30,000 of this total. In Japan, however, facsimile equipment tops the 300,000 unit mark and the market is growing at a rate of 30 per cent a year.

The Japanese brought advanced silicon chip technology into a previously mechanical system. Old designs had a photocell (which could detect areas of black and white areas), moving over the paper which was attached to a rotating drum. The photocell turned the information on the paper into a varying electric signal which could be transmitted along the ordinary telephone line to the receiving machine which performed the same process in reverse.

It could take up to six minutes to transmit a single sheet of A4 copy. The most modern facsimile machine coming on to the market transmits this in a mere 12 seconds. The next generation will be able to cut this time down to only five seconds.

The photoelectric cell has been replaced by a charged couple device as the scanning eye. Matsushita recently announced that it has developed a novel type of image sensor which can scan a letter-size document in one second. This will be used for its next range of high-speed facsimile machines. This sensor is based on eight silicon chips which touch the surface of the document and detect text.

In present systems, extra electronic circuitry ignores large expanses of white space on paper during scanning. This cuts down the time to scan a page and built-in codes reconstruct the white spaces at the



This Pitney Bowes facsimile machine, model 8800, has a 20-second transmission speed plus an autodialling facility for transmission outside of office hours

receiving end. The technique is known as data compression. The latest machines have built-in automatic diallers to save having to re-dial manually if the receiving machine is engaged.

In Japan, NEC has recently introduced a facsimile device which can store up to 15 pages of text in its computer memory and then transmit them later. This is useful at busy times of the day when it is difficult to transmit at the first try. The major manufacturers are now discussing the Group 4

machines of the future which will meet the five second deadline. Group 4 is being developed for the time when all telephone communication is digital. Digital telephone exchanges are being installed in greater numbers throughout Europe.

This new class of facsimile will be able to link into services such as teletext. Mr Arnold said that facsimile machines have the potential to become office copiers, capable of transmission or the printers for small computers also with communications facilities.

Both NEC and Cannon are developing laser systems. These are to replace the predominately thermal printing heads on today's machines. NEC, for example, has a system on trial in the U.S. with a major company. This can transmit 14 pages in a minute under the control of an NEC personal computer.

High-speed digital networks are not yet widely available at prices low enough for facsimile transmission. So it will be several years before these digital facsimile are introduced.



Electronic sealing, feeding and franking; Roneo Alcatel's 7505PMA electronic franking machine can handle up to 6,500 letters an hour

Microchip makes impact in the mailing room

Advances in mailing machines

BY A GRAY

MANY OF the routine jobs traditionally performed in the mailing room or at the secretary's desk have been transferred to the data-processing department as mail preparation goes on-line.

Companies with data-processing equipment of any kind, including small desk-top computers, can generate labels from their lists on the office printer. For more than half of UK businesses this is becoming familiar technology.

Not everyone likes the labelled envelope, however. It betrays a "third class" message and wastes the money invested in high quality printing equipment which can produce a personal style of circular letter. So one of this year's innovations is the customised direct printer which goes on-line to print lists directly on to envelopes for non-DP concerns. ASI has produced a keyboard unit which stores 1,000 names and addresses on each floppy disk.

Even so, labels are convenient and suitable for many purposes, particularly if they can be custom-designed for the job. Most machines' software programmes allow only one or two formats, but equipment introduced this year — by Zee, for example — enables users to create 896 different label designs and use them all in a mailing batch.

Meanwhile, the Post Office is persuading businesses to adopt its address coding system in time for full sorting automation in the next year. The many advantages of coding, as computerised mailing lists are emphasised by the Post Office, which is offering to subsidise the introduction of codes to a database.

There is plenty of scope for specialising certain departments — for example, with a coded list. There is a 2 per cent saving on first or second class post eligible for discount posting, and everyone benefits from faster postal services.

With mail preparation becoming a function of the DP department, appropriate equipment is increasingly coming into the category of computer peripheral machinery.

It is at the interface with the Post Office that the on-line process falters, however. No remedy seems possible unless vacuum tube system holders

like Soviet Marshall or D. D. Lawson are permitted to install a "wide area network" of mailing tubes along underground railway and sewage tunnels.

At present packages have to be weighed and franked. Here the microchip helps, with the electronic scales of such suppliers as Stevens and Avery saving time and enhancing accuracy in the task of assessing charges.

There are models which can programme up to 10 frequently-used parcel destinations on to dedicated keys. Surcharges such as registered mail can also be made single-stroke operations.

Franking remains the main hold-up, with the Post Office "exporting" the labour of charge payment in a manner that would surely be unacceptable in any other business.

Rescue

The microchip is coming to the rescue here, too, in the form of the value card. This Comintal device involves the purchase at the Post Office of a card valued for a week, a month or a quarter, according to a customer's requirement. The card is then inserted in a special machine.

The latest advance in value-card-operated frankers is a high-speed device which automatically dispenses and seals the labels. A model imported from West Germany by Envopak handles up to 10,000 envelopes an hour. It incorporates a postage fee register, letter counter, automatic franking device, date-setting and quick adjustment to envelope size.

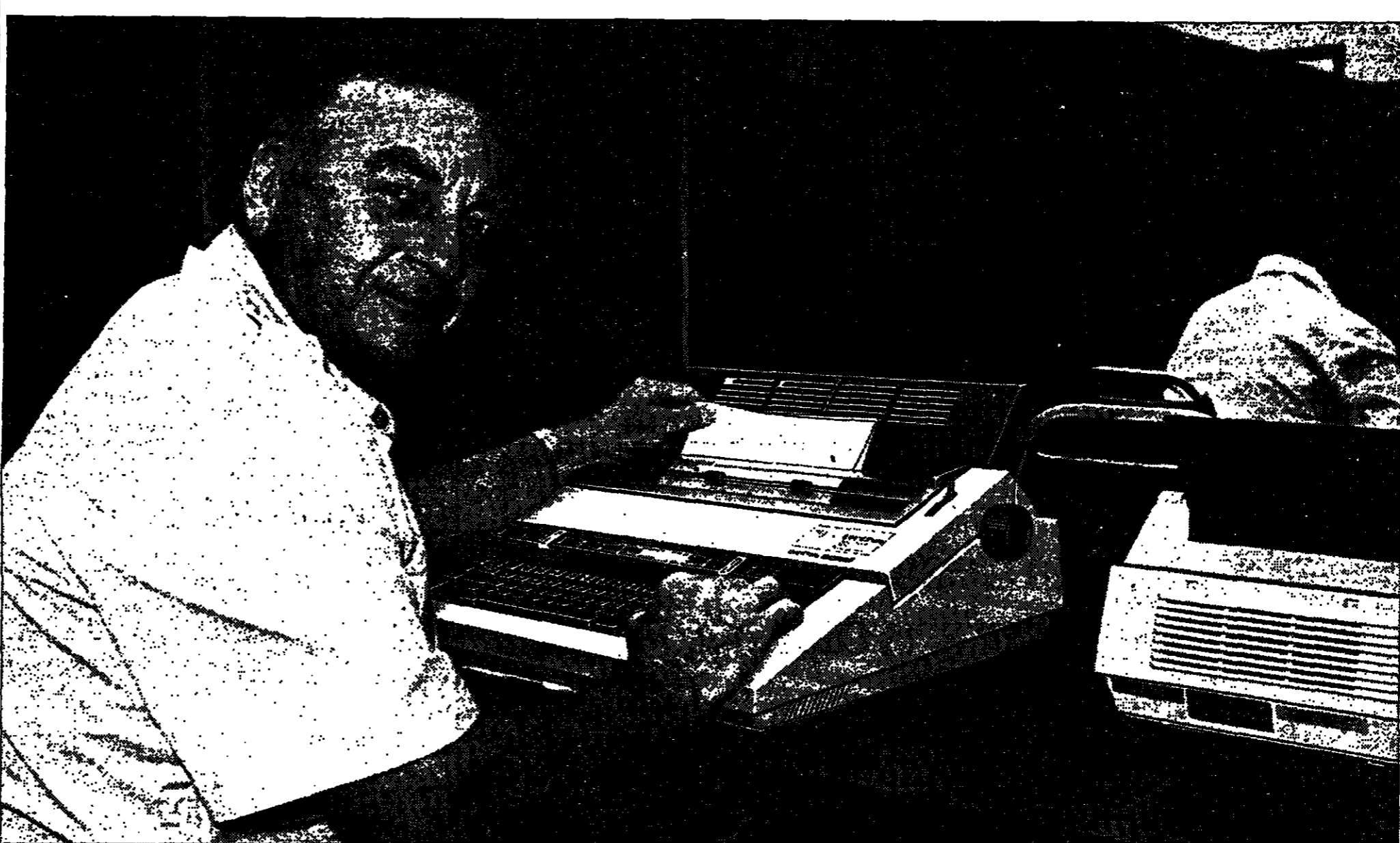
One of the main advantages of the value card system is that one need not carry a franking machine to a Post Office to have it officially reset. A cheaper way to do this chore has been introduced by Hester with a machine fitted with a detachable meter which weighs only 3.5 kg.

Because the machine itself does not have to be humped around it can be fitted with a heavier-duty motor which makes it more reliable.

Another new machine from Hester has a built-in printer which issues departmental totals when required.

One important improvement in the mailing room is the floppy disk, though this resourceful little repository of magnetic information is delicate and liable to "forget" if wetted, heated or otherwise misused.

Suppliers such as Envopak have been quick to come up with a range of floppy disk packaging aids.



Thank You EM-200!

Most people think the life of a reporter is exciting and glamorous. Well, a lot of times it is. At the recent Los Angeles Olympics, for example, we were able to witness athletic history in the making.

But once the festivities are over and deadlines draw near, our jobs boil down to the common denominator for success in any profession... hard work. That's the time we really appreciate a fine electronic typewriter like the Brother EM-200, the official typewriter of the Los Angeles Olympic Games.

Its 8K memory, computer interfacing capability, 500-character correction memory and 16-character visual display, really help to get that copy into final trim. That's why I'd like to say, "Thank you EM-200".

Thank you for making my job a lot easier than it could have been.

Official Typewriter of the Los Angeles 1984 Olympic Games



Sumner Bishop
Sports Editor
The Atlanta Journal

brother
Electronic Office Typewriters

"Who makes good things, makes good friends."
Brother Industries, Ltd. Nagoya, Japan

Office Equipment 6

Dramatic changes under way

New generation telephone equipment

JOE SIMPSON

THE LAST 18 months have seen a dramatic transformation in Britain's telephony market. Two factors have been largely responsible. The first is the great incentive provided both to British Telecom and to the plethora of privately-owned companies operating in the market by the liberalisation of the market and the forthcoming "privatisation" of BT.

The second factor is the enormous pace of micro-electronics development which has led to sophisticated technology becoming available at increasingly cheap prices.

The major beneficiaries have been the business purchasers, although the growth of interest in the market has also opened the door to an energetic bunch of entrepreneurs who are specialising in this market area. The choice of suppliers has never been greater.

BT itself has undergone a period of active development, producing both an extensively revised product portfolio and a new image through an intensive advertising campaign. The face that it now offers to the business customer of good service, coupled with state-of-the-art technology, is largely accurate. BT can offer systems to meet most business needs, including a new range of intelligent telephones with both business and domestic applications.

Improvements

Established manufacturers and suppliers have also responded to the changing market. Many feel that their progress has been slowed by an approval system hamstringing by the need to evaluate equipment against existing criteria, which has the effect of penalising true innovation. Recent history, however, suggests that the situation is improving.

The greatest change in the market has been the emergence of a thriving group of specialised telephony distributors and retail outlets. They mainly cater for the private individual and small business customer. Their effect has been the creation of a consumer-style marketplace for telephony equipment at the lower levels of price.

The key to their continued

ability to prosper lies in the crucial area of service, where they will both have to meet the stringent criteria needed to become approved service agents and continue to supply a level of service and after-sales support upon which commercial viability will increasingly rest.

Telephone equipment can be conveniently divided into three main areas: PABXs, key systems and telephones. The transition from analogue to digital technology has placed the PABX (personal automatic branch exchange) at the leading edge of office automation.

Modern PABXs not only offer extension users a wide range of sophisticated voice communication facilities such as abbreviated dialling, call diversion, wait on busy, and so on, but are also being seen in a data communications role.

Since liberalisation allowed the major manufacturers to supply and install PABXs with fewer than 100 lines and also supply the line wiring, designers have been increasingly active in developing systems which can combine both voice and data functions.

Thus, although full integration is not appropriate in the majority of cases at present, the modern purchaser should be looking for a PABX that will be

ready for further applications as they arise.

As the situation stands, it seems that while LANs (local area networks) will handle high-speed data transfer from computer to computer, the PABX will increasingly be used for routine voice and data communications.

The main barriers to widespread application of this technology are the lack of standards for interfacing the different parts of an office automation system and the lack of a digital network. Market forces and time respectively will alter the situation, however, and the PABX will be at the forefront of office automation.

Workstations

Due to the sophistication of current PABXs, one area that is bound to see rapid growth is executive workstations; intelligent telephones which combine data and voice functions and provide an access to electronic mail services.

Many of the executive workstations on the market can also help the business user to get the most from the company's PABX, whose wealth of functions are often underutilised by those with nothing more than a push-button phone to

use and where access to services depends on the remembering of codes.

The growth of equipment sales has been most rapid in the small business sector. This is due to the fact that PABXs have made little impact in this sector and because of the sheer size of the market.

Nearly 50 per cent of all companies in the UK employ 20 people or fewer, which goes a long way to explain the popularity of the second major area of telephone equipment: key systems.

These systems place the benefits of SPC (stored program control) in a package that provides the level of sophistication just right for the small business at a price they can afford.

Normally, each extension will cost between £300 and £400, although prices can range from below £300 to over £600. The result is the creation of a market of over 400 units a year, although setting precise criteria on the number of staff required to make a key system viable is hard. This explains why a company such as Mitel produces PABX/key system hybrids such as the Entrepreneur.

Basically, user-operated computerised versions of manual PABXs, key systems offer ease of use with push button facilities. A machine's capabilities are normally contained in a numeric sequence after this name, so that GEC's 520 offers five external lines and 20 extensions.

Systems can be operated below their maximum specification, allowing them to grow with the company; an important feature.

Key systems offer many features, although it is important to identify those of direct use to your company before looking at specific systems to avoid being confused by the sheer number of capabilities.

The most useful of the generally available features are full two-way loudspeaking which allows hands-free operation on both exchange lines and internal calls, together with the paging of staff.

Key systems offer many features, although it is important to identify those of direct use to your company before looking at specific systems to avoid being confused by the sheer number of capabilities.

The most useful of the generally available features are full two-way loudspeaking which allows hands-free operation on both exchange lines and internal calls, together with the paging of staff.

Key systems offer many features, although it is important to identify those of direct use to your company before looking at specific systems to avoid being confused by the sheer number of capabilities.

The most useful of the generally available features are full two-way loudspeaking which allows hands-free operation on both exchange lines and internal calls, together with the paging of staff.

Memories

Abbreviated dialling, usually with both personal extension memories and system memories, call transferring, call barring and automatic diversion are all worth having. It should also be remembered that since incoming calls can be answered from all extensions, it is important to have built-in operator features such as a night service.

Many key systems now feature units with "D" displays. These can be used to indicate simple information like the extension called or to give more complex information like the number of units used on a call, and the cost of those units. With all of these features available to all staff, if required, proper training is essential to get the best out of your investment.



There are now more than 100 different models of microcomputers on the market. The software sector is also growing rapidly with more than 5,000 programmes available. Above: the Xerox 16/8 microcomputer, incorporating two processors with two quite separate memories

New models flood into crowded market place

Microcomputers

ELAINE WILLIAMS

HARDLY a day passes without the announcement of a new model of personal computer. In the past month or so IBM has added the AT, a new version of its successful PC. Meanwhile, Data General and Philips have launched their own ranges, vying for a market share with companies such as Olivetti, Burroughs, Apple, ICL, Hewlett Packard, Texas Instruments and Sony.

Most big electronics and computer companies now produce microcomputers, which they have realised, are now making inroads into the office equipment field.

Large companies buy microcomputers in their hundreds to provide managers with financial information and link into larger computer systems, for example. Small businesses and individuals can run their accounts and stock control and use the personal computer as a word processor.

IBM's PC, in its various forms, is the market leader and is now reckoned to account for about 70 per cent of all machines sold in this sector of the computer market.

Relatively late into the microcomputer market, IBM waited until the market was proved before introducing the PC. Though the computer was technically not so innovative,

buyers felt that IBM was unlikely to drop suddenly out of the market.

This was an important selling point in a market where financial fortunes can change dramatically. It is acknowledged within the industry that few of the 70 or so computer models from more than 150 manufacturers around the world can survive. In the past year some 300 products have been taken off the market and about 30 companies have ceased trading.

Japanese manufacturers, recognising this problem, have set about standardising their competing models. The idea is to allow customers to use the same computer programmes on any model and to communicate with each other for services like electronic mail.

Until recently there was a tendency to make computers incompatible in the hope that a customer would stick to a single make.

In the small computer market businesses want more freedom in the way they link their equipment together, picking components from a variety of manufacturers. Japanese companies, including Sony, Sharp, Seiko and Toshiba, have chosen a single operating system, named MCX, which dictates how the computer handles programs.

Computers can now use one of 240 different operating systems, of which MS-DOS and CP/M are the most popular. But it still remains to be seen if the Japanese companies will be successful with their strategy

on operating systems.

Microcomputers present a problem in that they not only have different operating systems but must be able to work in widely differing configurations. For example, some machines must be powerful enough to allow more than one user at a time or be used by only one.

It might be an 8-bit, 16-bit or even 32-bit computer. This is a measure of the speed and computational ability. Eight-bit computers tend to use the CP/M operating system. No outright leader has emerged for 16-bit, though CP/M and PC-DOS and MS-DOS are popular.

Compatibility

Some manufacturers have adopted a policy of making their computers compatible with IBM personal computers. This is probably the second-largest sector behind IBM itself. ACT's Sirius and Apricot machines are examples of such machines.

As important as the microcomputer itself are the programs—the software—to go with it. This sector of the market has grown rapidly over the past year the number of computer programs available has doubled.

In the UK alone it is estimated that there are more than 5,000 programs available from 1,300 suppliers. The strongest growth has come in business software, including database information systems, spreadsheets and financial planning. Business graphics has also grown rapidly in the past year or so.

Software companies are also tending to aim at particular markets like accountancy and stockbroking, while scientific software is becoming increasingly important.



Telecom Gold data link

MANY companies in the information business now depend on the speed with which they can make their computerised database available. Where their clients have direct access to the database from their own computer systems or other terminals, great frustration can be caused by sudden failure of the host computer system.

UAFT Infolink, a leading UK holder of credit data, has solved this problem by offering a back-up information service through Telecom Gold's electronic mail system.

UAFT Infolink is owned by its members, currently numbering 10,000, who each contribute to and have access to the automatic credit enquiry database, (ACE), which is directly accessed from more than 1,000 locations in the UK, normally via viewdata, teletype, telex or computer-to-computer links.

Our business is making your's work.

- Office space is expensive, it makes business sense to use it efficiently.
- An integrated, flexible, modular office furniture system is one of the best starts.
- Efficient, sophisticated, integral wire management facility in both desks and screens won't hurt either.
- System storage that can save space will be more than useful.
- A planning service to put the above together in the most beneficial way to yourself is ideal.
- Complete control over installation is very important.
- And finally a thorough after sales service is what you need.



That's our business, that's our service. Some of the world's largest companies have standardised either partly or wholly on the Intercraft system.



Intercraft design, manufacture and install worldwide with an unrivalled after sales service.

With continuity of supply guaranteed making standardisation economical and worthwhile.

See the system working hard in our showrooms, or send for details to Berkeley Square House, Berkeley Square, London W1. Telephone: 01-409 1588. Telex: 28488.

INTERCRAFT

Showrooms also at Faulkner House, Manchester M1, Telephone 061-2369480 and Crown House, 37-41 Prince Street, Bristol, Telephone 0272-279177

More alternatives in cable management

Linking the systems

GEOFFREY CHARLISH

THE GROWING numbers of electronic units in offices, ranging from typewriters to personal computers, has called for new approaches to the safe, convenient and cost-effective provision of electric cabling.

Eventually there will be either change or expansion in most offices, so that any conventional power and signal cable installation will need expensive modification. The alternative is long leads trailing over the floor and multi-socket adapters.

The use of platform floors in computer rooms is already well known. Cost and performance comparisons now also prove this to be a popular choice for offices—a fact borne out by the increase in the number of such floors being installed in both new buildings and in refurbishment schemes. One of the largest UK manufacturers, Propador, reports a three-fold increase in demand for office applications over the past three years.

In smaller offices, with up to a dozen or so people, one of the multi-outlet systems, wall mounted, can produce a solution to the cable management problem.

Electropoint of Feltham, Middlesex, offers a system called Multipoint which consists of a long plastic extrusion enclosing three rigidly-supported copper conductor rails. At 300mm intervals the rail is specially formed to accept and grip the pins of a standard 13 Amp plug. A sliding guard closes to cover the pin holes after the plug is removed.

Multipoint can be run horizontally at any height round the wall of a new or refurbished office and the ducting has space for signal cables as well. The company says the cost

can be as little as £4.50 per socket, including labour, whereas conventional sockets can cost up to £30 each to install.

A similar system from Electrak of Kingston-on-Thames, also uses three bus bars, but the connection arrangement is different. A special plug is inserted and then turned through 90 degrees. The turning action brings the bus bars into contact with their respective bus bars, which are spaced one behind the other away from the wall.

Electrak is claimed to be particularly safe. A finger can be inserted quite safely in the socket holes since all the live metal is well above and protected in slots within the internal plastic. Furthermore, the socket outlets are spaced at either 100mm or 200mm, so that an appliance can always be plugged in with the shortest possible cord.

Another version that will also accommodate signal cables is available.

Electrak costs about £35 per metre run and £1.60 for a plug. It is claimed that beyond just one or two outlets in a room, the system becomes progressively cheaper than conventional installations.

In large open-plan offices with no partitioning, where spurs workstations might be 30 or 40 ft from a wall, false floors or ceilings are needed.

Electrak for example, is being used by Floorplan Electrical of Blackburn, which specialises in underfloor systems.

In its flush-floor trunking system, a 65 mm deep three-compartment duct is sunk into the screed at the building or refurbishment stage. A series of floor-level lids forms the top surface. Electrak runs in the centre compartment, leaving the outside ones for telephone and data cables.

Any lid can be exchanged for a floor outlet box to which the office equipment is connected.

This in turn links to the nearest Electrak outlet and to the signal cabling systems under the floor.

Since Electrak was launched in March 1983, the emphasis has shifted from walls to floors (or ceilings) and Mr Christopher Adams, finance director, believes future business will divide about equally between the two.

Earlier this year a system called Versa-Track was introduced into the UK by the U.S.-based company Thomas and Betts.

Provided that carpet tiles are used, this flat cabling system can be run on the floor surface to give complete flexibility of workstation positioning, which, the company claims, is not always possible with underfloor ducts. Office layout changes can be made while normal work goes on.

Versa-Track is only 0.034 inch thick and causes no noticeable "hump" under the carpet. The main cable consists of three thin copper strips, 0.75 inch wide, enclosed on each side by laminated polyester strips covering the full width of about 3 ins.

Small diameter coaxial cables and telephone cables with up to 25 pairs are moulded within flat strips 0.5 inch wide or less. They are run separately adjacent to the main system and the whole is protected from above by a thin steel strip taped to the floor.

To branch off from a main run, special punching and crimping tools are used in a joining process taking about five minutes.

Thomas and Betts claims that an average office can be cabled for 60 per cent of the cost of the conventional ducting approach.

On the other hand, Toshiba believes flat cabling is too expensive. In Japan it has introduced an underfloor system that accommodates broadband and baseband (high and low information capacity) coupling devices for networking, as well as the cable itself.

Use a micro without buying one?



Why not?

Making this possible is our speciality!

Come into our office, and see the best in personal computers and their software.

Almost any leading brand name you've heard of. Then, if you like, select a microcomputer to RENT for the period you want.

If you are happy with your choice, a purchase option is available. If not, you can try another!

No matter which way you turn, you get unbiased professional advice. Plus training. Plus maintenance. Plus! Plus! Learning more is painless too. Just post this coupon.

Name _____
 Organisation _____
 Address _____
 Telephone _____

CCA (MICRO RENTALS) LIMITED
 Unit 7-9, Imperial Studios,
 Imperial Road, London SW6 2AG
 Telephone: 01-731 4310

Office Equipment 7

Computer printouts end the 'paperless office' myth

Stationery and consumables
MICHAEL WELSHIRE

DESPITE ALL the predictions of the 'paperless' office, the desk-top revolution is bringing instead a much-needed boost for the commercial stationery sector.

In Britain, the biggest growth area in the stationery market is for computer printout products. Sales in this area increased by 50 per cent last year.

The prospect of the so-called 'paperless office' is discounted by most observers, who believe that there will always be paper in one form or another, including photocopies and printouts, despite computers, microfilm and fiche, and such systems as telex and facsimile transmission equipment.

A Key Note report on the stationery market says there will be no sudden end to the demand for written communications, so that filing and other conventional stationery systems will have a future for at least the next 20 years.

The electronic office is also bringing with it other lucrative and expanding markets for 'consumable' items: the ribbons, printheads and floppy disks without which many kinds of office equipment simply cannot function.

Rank Xerox is the biggest supplier of cut sheet paper in Europe. In 1983, its office supplies division achieved a 10 per cent growth in profits, despite a reduction in paper prices and intensive competition because of over-capacity in the paper industry.

The stationery market has undergone lean times in recent years as companies pruned their expenditure on office supplies during the recession.

There are, nevertheless, signs now of a distinct upturn in the market. This trend should continue for the next few years, according to the latest Euromonitor report on the sector.

New outlets

In Britain, the stationery market is served by more than 500 manufacturers and dealers in an extensive and growing product range that straddles the consumer and commercial markets. As the concept of the 'home office' develops, and high street retail outlets seek a larger market share of office and commercial products, so the distinction between consumer and commercial sales is becoming more blurred.

Office Equipment Digest (OED) in a recent summary of the market, notes that stationery supplies are a less exciting and perhaps less interesting area than office machine or furniture, but the sector represents a very substantial amount of expenditure and has been relatively stable.

Some of the larger manufacturers in this sector have found



Despite the advent of the electronic office, there will always be paper in one form or another. Above: a multi-purpose information distributor from IBM prints documents with a laser in original quality and receives and transmits electronically over ordinary telephone lines. The equipment can be used in conjunction with the IBM Mag

Card 82 typewriter. The laser technology enables the information distributor to print up to two separate type styles on a single page in any sequence. Nine type styles are available

maximum bulk discounts, thus allowing them to compete effectively. The largest of these consortiums is the Club Stationery group (turnover £42m in 1983), which includes 19 regional wholesalers, most of which are long-established family companies. Instat (turnover £29m), the next largest consortium, has 13 member-wholesalers.

Direct sale manufacturers used to claim that an order of £300-£400 was essential for economical sales, but this has probably risen to £400-£500 now, says the Key Note report.

The trend is continuing towards regular deliveries by contract stationers, replacing assorted purchases out of the petty cash in many companies. The stationery market is rife with price-cutting and discounting, caused in part by lack of growth in most sectors, fierce competition between retail outlets, as well as direct sales and discounting by manufacturers and wholesalers.

Wholesalers have secured a strong position in the UK stationery trade. The three major companies are Spicers of Cambridge; John Heath of Birmingham and Neville and Gladstone of Barnet. Turnover figures last year were, respectively, £48m, £40m and £14m.

Various independent wholesalers are forming buying consortiums. These allow the small local wholesaler to buy at the

same price as the larger wholesaler. Single source has the attraction of shifting storage, distribution and stock-holding costs to the supplier, and the user also cuts labour and accounting costs.

Users also tend to rationalise the lines they use: out of 2,500 products available from Cartwright Brice, for example, the average number specified is 150.

The most common objection to the system from non-users is the fear of buying all items from one supplier, says Mr Ray Hook, Cartwright Brice's marketing manager, "but users with high annual spends consider the savings outweigh this particular hazard—providing the supplier chosen has sufficient size and experience to operate the system."

Key Note Business Information (01-253 3006); Office Equipment Digest (01-251 6504).

Euromonitor: stationery report (details on 01-251 6024).

Specialists

A number of producers are also moving into direct mail, perhaps forgetting that the specialists, such as Inmac, are not only entrenched, but that direct mail catalogues need to be comprehensive in the products covered and well-produced if they are to succeed and create confidence in the market.

More than 300 major UK companies have adopted a single-source method of purchasing stationery, according to a new report. Single source supply means that a company contracts one supplier to provide all its stationery requirements.

The survey, conducted by Cartwright Brice, the London-based stationery supplier and

It's here!
London's biggest business show for ten years...

LONDON BUSINESS EQUIPMENT SHOW

Imagine the highlights of 50 specialist shows in one...

23-26 October, Earls Court.
Opens daily from 9.30 am to 5.30 pm. Closes Friday at 4.00 pm.

- You're thinking of LBES! It's the one business show in London that brings together everything that's special from a year's 'specialist' shows. And much, much more!
- Huge range of business equipment on display — from microcomputers to office copiers, systems furniture to telecommunications.
- Central London location — easy access by British Rail, Underground or road.
- Free entry for you and a colleague with the voucher below — clip it out, now.

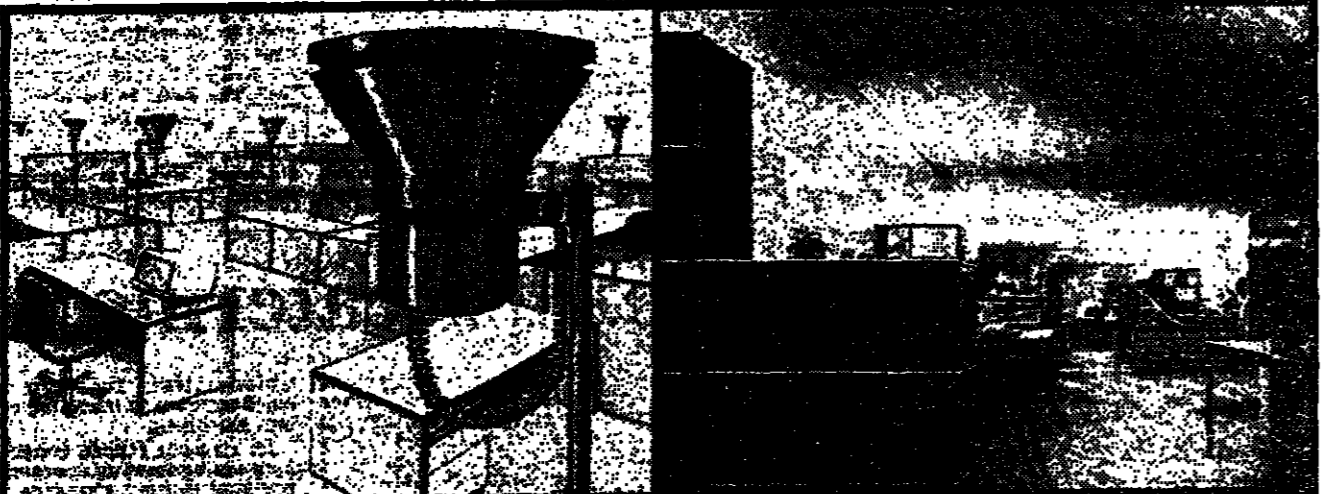
- Here are just some of the major names you'll see
- Panasonic • Sharp • 3M • Ricoh • U-Bix • Canon • Minolta • Digital • Turberville Smith • Rank Xerox • IBM • Brother • Bell & Howell • Silver Reed • Olympia • Wordnet • O.E.M. • Pitney Bowes • Gestetner • Project Furniture • Wincor • Unity • AES-Data • Sony • K.A.S. • Kalle Infotec • Agfa-Gevaert • Kardex • Olympus • Dictaphone • Harris Systems • Thos. Hill • Mita • Nobo • NCR • Anglo Leasing • Roneo Alcatel • Lion Office • Abbott Brothers • Kewfax • Kodak • Acorn
- (Correct at time of going to press)
- Jointly organised by: B.E.D. Exhibitions Ltd and BETA Exhibitions Ltd — two of the biggest names in business exhibitions.

Bring this entry voucher to LBES — save £6!

Admission to LBES is £3 on the door. But bring this voucher and we'll admit you and a colleague free.

23-26 October, Earls Court.
Tues-Thurs: 09.30—17.30 hrs. Fri: 09.30—16.00 hrs.

Cut this voucher out and exchange it for two complimentary tickets to LBES (worth £6) at the registration desk.
(No person under 18 years old will be admitted.) FT8/10/84



Glare-free up-lighting: not a new idea, but one that is now proving a boon in the age of the VDU. Left: the new range of up-lighters from Project Office Furniture, and right: lighting installed in the Swiss Haller furniture system at the London offices of Building Design Partnership. The BDP up-lighters are the SON-DL high pressure sodium lamp and the mercury halide Kolora from Thorn Lighting.

Up-lighting: a new buzz-word

Lighting the electronic office
RITA GRAY

LIGHTING is a complex issue in the electronic office—but it is an area that often receives inadequate attention.

Office managers ignore it at their own risk, because VDUs are by no means proven healthy for everybody to use under any old conditions.

Bad lighting can turn video screens into positive health hazards, causing refractive disorders, muscle imbalances and disease in the eye and its orbit—result: staff complaining of headaches and staying away from work. The very productivity that is sought by automating is lost.

If your office has the classic lighting system of the styles

and severities, so much of neon beams slice across the ceiling of an open office, try taking a look into the screen of one of the word processors. It is quite likely to glare and glitter like the oncoming lane of the M1 at night. This is bad news: you need low-luminance downward directional luminaires.

In plain English that means concealed lighting—strips hidden, for example, by cleverly designed covers so that you only see the glare from directly underneath, if at all.

Overhead lighting that does not endanger the health of screen-working staff is unlikely to be as cost-efficient as the easy answers of yesterday, either from the energy overhead point of view or that of capital investment. This is another hidden cost factor of office automation.

Actually, in the automated electronic office lighting should not be situated overhead at all. The ceiling should be light, of

course, but the sources should be elsewhere. That brings up a buzz-word of the VDU age: up-lighting.

Up-lighting is not a new idea—it was big in the 1930s in the London Underground, and on the River Queen Mary—but it is coming back to the fore as the only way to reduce drastically overall glare in the electronic office.

Combination

Conventional halogen-lamp uplighters are good for small spaces, but they are costly and tend to drain an area of its colour. In bigger areas they can be combined with local lighting sources but here the snag is that many of the local lights have to be attached to modular furniture units. When such units are moved, as they frequently are in an open plan system, then the lighting plan is spoiled.

Nevertheless, it is possible

with floodlight-type uplighting (high intensity discharge lamps) to obtain legally required light levels on work surfaces with a glare level below the recommended index of 19.

One type of local light which is useful in this context is the sort of bracket desk lamp coming out of Italy whose dish curves upside down for use with screen equipment.

The glare problem is not about to go away. Soon, just about every important desk in British business will be equipped with a cathode ray tube. It is a big health issue which bears the seeds of a severe health crisis as statistics emerge over the coming years.

The trouble is, a radical approach to eliminating glare involves re-designing the office from top to bottom. And we won't get on top of that problem for a while yet.

C&C
COMPUTERS AND COMMUNICATIONS
TECHNOLOGY

How NEC helps curb rising costs

At NEC, we have always believed that automation effectively raises productivity and lowers business costs.

Through "C&C", our unique integrated computer and communications technology, we're proving this to be true.

The NEC digital EPEX system, based on 80 years of know-how in the telecommunications field, illustrates this cost-cutting potential. Utilizing the latest fiber optics transmission techniques, it lets you link voice and data systems into a single cost-effective communications network accessible to all.

Computers incorporating our own advanced semiconductors plug nicely into this network, trimming profit-eating expenditures all along the way. This applies as much to our large general-purpose computers and ASTRA business computers as it does to our personal computers.

The NEC tele-conference system takes our philosophy yet another step. Combining a variety of data processing systems with communications systems, it can save businesses millions of dollars annually—and business people thousands of hours of needless travel. These are only a few of over 15,000 different industrial, business and home electronics products manufactured by NEC.

They spearhead our drive to boost productivity and curb costs by way of "C&C"—a concern shared by our customers in over 140 countries.

NEC
NEC Corporation
Tokyo, Japan

office furniture from abness

See the new
Linear Executive System range

Stand No 188
London Business Equipment Show,
Earls Court, 23-26 October
Also on show Art Metal office furniture
nearest London showroom
Hill & Noyes, 23 Bruton Street, London W1

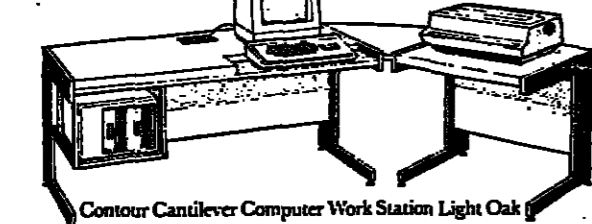
Abness

Abbott Bros (Southall) Ltd
Abbess House, High Street
Southall, Middx UB1 3HE
Telephone 01-574 6961

Alan Cooper

Office Furniture Systems. The office of the future needs our brochure today. Send for your copy.

To: Alan Cooper Limited, Burnley Road, Todmorden,
Lancashire OL14 7ED. Tel: Todmorden (STD 070 681) 5111



Contour Cantilever Computer Work Station Light Oak

NAME _____
COMPANY _____
POSITION _____
ADDRESS _____
TELEPHONE NUMBER _____



● New-look London dealer rooms: (right) a scheme designed by the Offescape group at Cutlers Gardens in the City of London, incorporating equipment from Specialised Banking Furniture International. Left: Intercraft's Transform system range has been chosen by Moore Govett for their offices in Heaven House, Elgh Holborn, WCL, which are being refurbished. Included in Intercraft's contract are Transform

dealer desks, office desks, file storage, screens and Sedas chairs for 88 dealers. The latest innovation for the Moore Govett dealer workstations are the Intercraft uplighters. Intercraft's contract has recently been extended to cover the sixth-floor equities and research departments. Installation will be carried out while the floor is partially occupied.

Packages offer cash flow benefits

Leasing arrangements

MICHAEL WILTSHIRE

BRITAIN has the largest leasing market for office equipment in Europe, with a 47 per cent increase in business last year reported by the 63 member companies of the Equipment Leasing Association.

This brought the total of office equipment obtained through ELA members alone to more than £700m, but a very substantial amount of equipment is obtained by end-users dealing directly with manufacturers.

The office equipment market is "very leasing orientated," not merely for the tax benefits but mainly because of cash-flow advantages, says the ELA. In a study of current methods of financing office automation, the National Business Equipment Survey estimates that, on average, 43 per cent of equipment is leased, 40 per cent is bought, 15 per cent is rented and 2 per cent is obtained on hire purchase arrangements.

There are indications now,

however, that with the economy recovering and the consequent improvement in cash flow, that more office establishments are trying to buy less-expensive items outright, says NBEES. Even a high proportion of relatively expensive equipment, such as facsimile machines, are bought outright (47 per cent).

The increase in leasing in the office sector reflects the expansion of Britain's leasing industry which is likely to achieve more than £3bn worth of new business this year, as industry brings forward its investment plans, following the phased reduction of capital allowances announced in the Budget.

There are clearly variations in the level of leasing within the various sectors of office equipment. With copiers, for example, the level of leasing may be as high as 80 per cent. Leasing arrangements have particular appeal to new companies, since the office environment is an important factor in giving clients their first impression of the business. Its image, efficiency and management techniques may all be pre-judged from this first experience. Furniture, for example, may be leased. The period of the lease can be fixed to suit a client's needs; rentals are un-

affected by inflation and are fully allowable for tax purposes. Black Arrow Finance, which has wide experience in office equipment leasing, says that many companies—large and small, public and private—furnish their premises in this way, obtaining the use of bedroom, general office and reception furniture, as well as carpeting, curtaining, partitioning and lighting.

Example

Monthly rentals for a three-year agreement could range from £100 to £230 for, say, six desks, four filing units, reception and office seating, two cupboards, carpeting for a business with 25 staff from £450 to £950.

Black Arrow Finance was approached recently by a newly incorporated property development company in London's West End which provides high-quality, short-term rented office accommodation.

In one building more than £40,000 of furniture was supplied on lease—executive and secretarial desks, storage units and cupboards from top-quality ranges with full wire management. Executive, secretarial and reception seating was also provided.

Thus offices which might otherwise have been let as empty units to small businesses have been fully equipped for occupation.

The monthly rental of about £1,500 can be apportioned to each of the individually let office suites, giving the property company complete management and financial control.

The range of leasing packages throughout the office equipment industry is increasing steadily, particularly in the computer market. Anglo Leasing, a leading company in the field, is, for example, launching DataLease for the microcomputer market this month.

The package is geared primarily to a four-year leasing term, although three- or five-year options are available. Through Anglo DataLease, microcomputer dealers can offer a lease on a majority of micro-systems, including some software and a mixture of hardware, if required.

Anglo, which has 20 years' experience in leasing, aims to provide additional advantages to both the dealer and end-user. Under the agreement, dealers receive payments within three days of submitting an invoice—an important factor for small and medium-sized dealerships.

Planners seek greater degree of flexibility

Furniture design trends

MICHAEL WILTSHIRE

BRITISH FURNITURE manufacturers are fighting back strongly against imported products by introducing highly flexible and stylish systems for the automated office. The British Equipment Trade Association, through its furniture division, has formed the British Office Furniture Manufacturers' Group to promote the products and services of leading furniture manufacturers which together have a turnover of around £150m.

A number of leading manufacturers take the view that sooner or later there will be much simplification in the systems furniture ranges, as a result of developments in office technology.

This view is emphasised by Caplan, which has seen an 87 per cent increase in sales in the six months of this year. Mr Brian Matthews, Caplan's chief executive commenting on the emergence of the micro-computer in even the smallest businesses, says that "very few companies want to totally re-vamp their office environment with complex screen-based systems furniture costing £1,500 a workstation just to accommodate a new piece of office machinery."

The versatile British-made Office Kit, for example, is the result of intensive study of the needs of the working office and its development. The system has achieved "considerable success" since it was launched two years ago. It has a range of flexible components which come in kit form for on-site assembly. The system takes care of wiring for information technology equipment and also caters for the design-conscious small office user.

Consortium

The Office Kit consortium, brought together by Michael Carson, comprises of four leading UK companies, each with extensive experience in their own field, to manufacture, assemble and market the system. The main manufacturing contractor is F. Rendell, part of the Lovell Construction Group.

Lucas Furniture Systems, an independent UK company, gained a Design Council award this year for its Programme 2 range.

The system has been adopted as the recommended furniture range for ICL, the UK computer manufacturer. In recent years, ICL has been implementing a policy of achieving common standards in office environments across the Group—providing offices with high visual appearance, high quality and the flexibility needed in today's fast-changing business world.

Although Programme 2 was originally selected for its large range of components, ICL has now adapted its furnishing approach, providing L-shaped work stations, with work surfaces all at the same height (as "machine" height tables inhibit flexibility—in use—and are not

essential with flatter keyboard design). There are screens where privacy is required, a mobile pedestal for personal storage and a medium-height storage unit for volume/general storage. This basic "ICL workstation" can then be subtly modified according to job function and layout requirements.

STC Telecommunications (switching division) has also adopted the Lucas Programme 2 system. The National Business Equipment Survey, which has carried out a review of the systems market, notes that, in recent years the sector has been inundated with "medium" ranges. The recent has been a pronounced tendency for the ranges to ape each other visually. One office planner in the survey explained that "a major problem in the systems furniture industry at the moment is that they all look the same."

Evaluation

Other office-planners felt that going to furniture exhibitions can be a mind-boggling experience because of the sameness of the furniture on offer. There's very little dramatic difference between manufacturers' products.

The systems furniture survey shows how office-design experts approach the task of evaluating suppliers and their ranges, the importance they attach to various aspects of products, both aesthetic and practical, and analyses their opinion on a group of suppliers.

Jean Davis, marketing development manager for NBEES, says that "one of the most important aspects considered" by planners is the question of function. This calls for a detailed analysis of the client's working requirements.

Office designers told NBEES that one of the most useful things a corporate purchaser could do was to persuade suppliers to let them visit existing installations.

This was felt to be a much more informative exercise than looking at displays of office furniture in showrooms and was second only in value to "mock-ups on client premises," where suppliers erect sample workstations in the prospective purchaser's offices.

The financial stability of the supplier and its reputation for continuity of supply were other areas the designers thought well worth looking into, on the grounds that the client may well want to come back for additional items in three, five or seven years' time. The survey shows considerable dissatisfaction with the level of after-sales service offered by suppliers, so any supplier who has succeeded in establishing a good reputation for service should have considerable edge over his competitors.

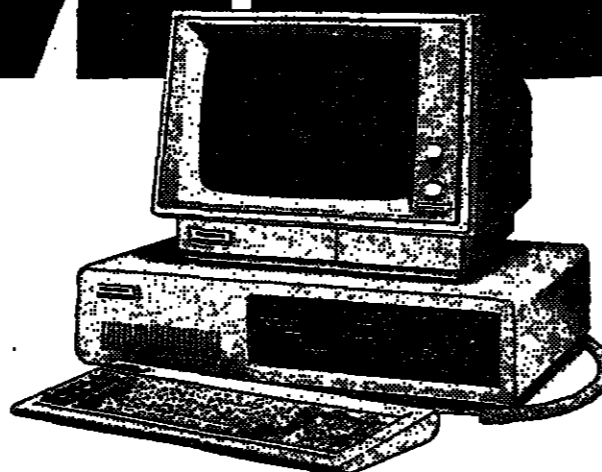
The report concludes that, for most part, it is the corporate purchaser, not the office designer, who makes the final choice from the shortlist of possible suppliers, underlining the importance of the purchaser's need to be well-informed on all aspects of suppliers' performance. For the decision is one that will have to be lived with for a considerable period of time.

Systems Furniture Survey: National Business Equipment Survey (Tel. 01-586 5420).

COLUMBIA

JUMBE

IA



THE BIGGEST NAME IN COMPUTERS YOU'VE PROBABLY NEVER HEARD OF.

Columbia's Compatibility—the best of only a handful of companies providing IBM-PC compatible systems.
Columbia's Value—providing a complete solution to your business requirements by offering you cost effective entry level systems with affordable expansion capabilities, and including thousands of pounds of excellent software with each system.
Columbia's Growth—one of the fastest growing companies in the high-technology field with an increasingly successful international reputation, based on price/performance and technical excellence.
Columbia's Merits—a full range of IBM-PC compatible systems, with the portable, floppy disc and Winchester based systems, complemented by the more expansive Columbia Professional.
Columbia IBMable and more!

Please send me further information about Columbia and their products.
Name _____ Title _____
Company _____
Address _____

COLUMBIA

C.D.P. COLUMBIA DATA PRODUCTS LTD.

Please send coupon to:
Ian Forbes, C.D.P. Columbia Data Products Ltd,
Greenco House, 36-40 High Street, Slough SL1 1EL,
Telephone: 0753 821991/2/3.

The demand for personal desk-top computers

Estimates for small business computer installations by type in the UK. The real future growth will be in personal desk-top computers which will be suitable for both domestic and office use, according to market analysts, MM Corporate Services.

	1982	1983	1984	1985
Small business systems	40,000	50,000	55,000	60,000
Mini computers	30,000	40,000	45,000	50,000
Micro computers	5,000	10,000	20,000	40,000
Personal desk tops	175,000	300,000	550,000	850,000
Totals	250,000	400,000	700,000	1,000,000

Microcomputer usage

ONE of the significant trends in UK offices is the increasing use of the microcomputer as a word processor. The trend is accelerated by manufacturers offering word processing as a composite package.

In 1983, NBEES estimated that 32 per cent of offices with micros used them as word processors as their prime application, but the current usage has now risen to 48 per cent. The survey also suggests that the need to combine data processing with word processing is of significant importance to end-users.



Mr. Gautam Barua, director of market analysts, NBEES

High cost of office catering

Employees' facilities

SUE SHORTLAND

STAFF CATERING has become a major consumer — of employers' money. Some organisations spend as much as four per cent of their annual wage bills on feeding their workforces.

The average price of a subsidised lunch in a staff restaurant is a mere 50 pence, according to a recent survey of catering prices, costs and subsidies carried out by the Industrial Society. But the true price of such a meal can be as high as £4. And with British industry serving more than 1bn meals in its staff restaurants and directors' dining rooms every year, the need has never been greater to find a way of reducing costs.

Staff restaurants are an attractive employee benefit. In general, the employee only pays the price of the uncooked, unprepared food—the raw materials. But this is only the tip of the catering iceberg. Behind the finished meal on its plate lie the hidden costs: fuel consumption, rates, planning and design, management expertise, legal requirements, refurbishment, insurance, personnel and training and, of course, labour. Industrial Society figures show that for the first six months of 1983, the ratio of labour costs (wages,

salaries, National Insurance contributions and employee benefits) to income (total sales excluding VAT) was being £112 to £100.

Consider a company's loss on cost of materials and labour per employee: during this same six-month period, the overall average loss (i.e. subsidy per person) was £61.03 (a quarterly average of £30.51). Comparing this with 1981-82 figures indicates further how employers' costs are rising. Over this period an employer suffered an average loss of £90.08 per employee (a quarterly average of £22.52).

Price rises

In order to try to recoup some of these costs, employers could put up meal prices. However, they do not appear keen to do this. If the staff restaurant is supposed to serve as part of the benefits package, it can hardly be considered too high by the staff using it. Price rises may lead to industrial relations implications—higher wage claims perhaps as well as lowered staff morale.

There is also a psychological barrier to prices drifting over the £1 mark. If it becomes cheaper for employees to bring their own lunch to work with them, they will opt for this rather than spending extra cash in the canteen. And if the numbers using the canteen fall—the cost per head for the employer rises.

So organisations are finding that as food costs continue to rise, they may be unable to

cover these by increased prices. And with labour and other costs rising to the subsidy per employee per year and hence the overall cost of running a staff restaurant will continue to spiral upwards. The majority of staff catering concerns are managed and run internally by British industry with a catering or personnel manager/department in charge of operation. But this in-house management does not necessarily provide the most cost-effective service.

It is becoming increasingly common practice for organisations to engage outside contractors to manage the catering facilities. Such contractors may be able to reduce a firm's catering costs considerably by their ability to buy raw materials in bulk and even purchase equipment at lower prices than a company catering manager could negotiate.

For instance, one company reported by Income Data Services (an independent industrial relations research company), in a study on industrial catering, that it believed that the use of catering contractor could lead to savings of £18,000 a year on its £53,000 catering bill.

The main contract caterers in the business are Gardner Merchant, Grandmet Catering Services, Sutcliffe Catering and ARA Food Services. It is estimated that over 35 per cent of organisations which provide catering facilities have this work done by outside contractors.

As a further attempt to reduce costs many companies are moving away from running staff restaurants, with their

typical meat and two veg lunches towards installing vending machines.

In a recent report, conducted by a major vending operator, 96 per cent of the 5,100 large companies surveyed used vending machines.

Although traditionally such machines have been acquired to provide staff with beverages, they are now increasingly being installed to sell food ranging from sandwiches through to full meals.

Vending machines which are restocked daily can provide cold meals, such as salads, but, as well as this, if teamed with a microwave oven, food that has been cooked and blast-chilled, can be quickly reheated to provide a hot lunch.

Options

Companies may either rent or buy these vending machines. They can also either buy the food and train their own staff to stock and maintain the machines or they can engage an outside contractor to do these tasks.

Here, too, the contractors can help the employer to make savings. They can receive discounts on raw materials which the employing organisation could not match as well as being able to provide a necessary maintenance backup service.

As costs continue to increase, employees need to be aware not only of the importance of making cost savings but also of the options available in the catering market.

Office Equipment 9

Big demand for computer-related systems

ONE OF the driving forces behind the expansion in the office furniture market is the phenomenal growth in microcomputer usage within business environments.

Computers, word processors, printers and disks all require purpose-designed desks and filing/storage facilities. Last year, according to the Office Equipment Digest, the UK market for tables and desks was up 12.5 per cent to £45m.

The strongest growth area is for computer-related systems furniture, a market which some analysts estimate to be worth £52m, although its true size is difficult to prove.

Mr Bob Steel, managing director of the Project group, predicting big growth in desk-based furniture of a modular nature suited to individual needs.

Mr Jack Lucas, marketing director of Lucas Furniture Systems which this year won a Design Council award for its Programme 2 range.

Mr Chris Glasston, chairman of Vickers Furniture, Britain's leading manufacturer of steel office furniture, confident that UK products can compete strongly in international markets.



Mr Bob Steel, managing director of the Project group; Mr Jack Lucas, marketing director of Lucas Furniture Systems; and Mr Chris Glasston, chairman of Vickers Furniture.

Project (15 per cent), and Caplan (10 per cent) according to NEBS. Project, with sales of 60,000 desks in 1983, now estimates its own market share at more than 20 per cent.

The Organisation for Market Research in Office Equipment (OMROE) conducted surveys late in 1983 which revealed that 73 per cent of a sample of companies both small and large intended to purchase microcomputers this year.

Mr Bob Steel, managing director of the Project group which includes Project Office Furniture and Propagator, of Luton, a leading raised-floor manufacturer.

Mr Jack Lucas, marketing director for Lucas Furniture Systems, which in May, this year, won a Design Council Award for its highly successful Programme 2 range.

Mr Chris Glasston, chairman of Vickers Furniture, Britain's leading manufacturer of steel office furniture, confident that UK products can compete strongly in international markets.

Mr Bob Steel, managing director of the Project group, predicting big growth in desk-based furniture of a modular nature suited to individual needs.

This year Lucas set a target of 25 per cent sales growth—and has already exceeded it.

Caplan Office Furniture, a subsidiary of Pentos, recently announced an 87 per cent increase in sales for the first six months of the year.

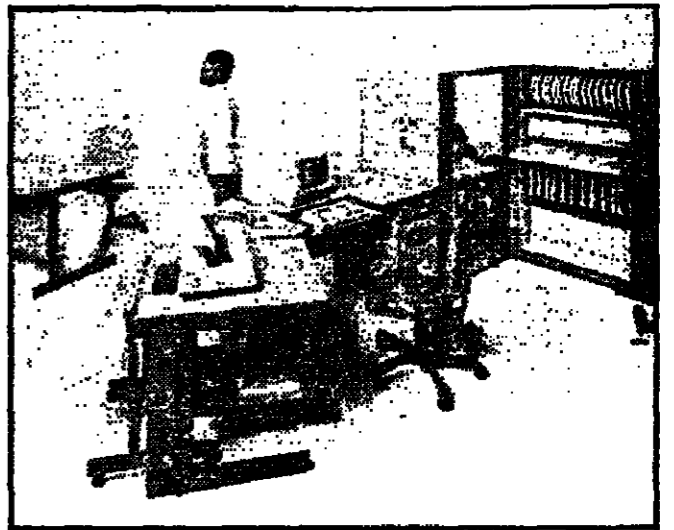
The furniture sector has seen a number of notable changes in the past year. Steelcase Strator, Europe's largest manufacturer of office furnishing systems, has decided to pursue a dealer-only policy.

Steelecase Strator (set up in 1979 as a joint venture between the U.S.-based Steelecase organisation and Group Forges le Strasbourg of France) is looking for 10 per cent of the overall UK market.

Last October, Ergonom International acquired a controlling interest in Hille International, one of Britain's leading designers and manufacturers of contract furniture.

Mr Bob Steel, managing director of the Project group which includes Project Office Furniture and Propagator, of Luton, a leading raised-floor manufacturer.

Mr Jack Lucas, marketing director for Lucas Furniture Systems, which in May, this year, won a Design Council Award for its highly successful Programme 2 range.



A micro-computer and printer workstation in Project's '4000' furniture range. Project is the largest manufacturer of wooden office furniture in Britain.

Facilities managers seek ways to cut costs

MILLIONS of pounds are spent each year on office products, services and maintenance by facilities managers—members of an emerging profession that is often difficult to identify in Britain.

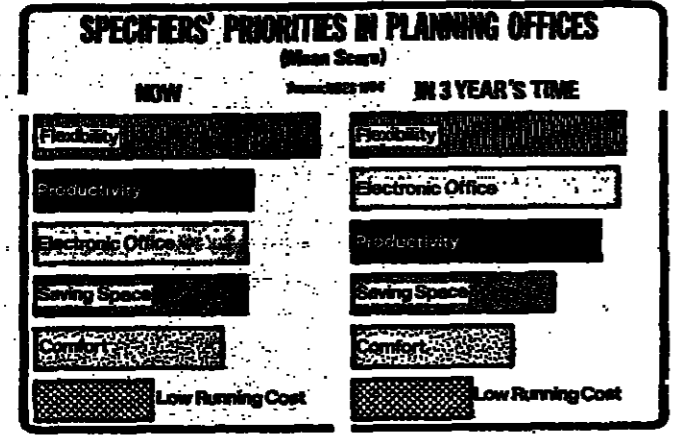
This summer moves were made in the UK to form a professional organisation for facilities managers, as already exists in the U.S. As organisations change more rapidly and the electronic office becomes inextricably bound up in the physical fabric of buildings, the result of poor judgment in managing space and facilities now leads to punishingly heavy occupancy costs.

The opening address of the conference entitled 'Managing the Workspace' was given by Sir Monty Finiston. Others taking part included Cornell University's Prof Franklin Becker, who leads the world's first graduate course for facilities managers; Dr Francis Duffy, a partner in architectural consultants DEGWA, and editor-in-chief of 'Facilities', a monthly digest for building managers; Richard Eppley, for the International Facility Management Association; and Mr Terry Trickett of the Institute of Administrative Management.

For the first time in London.

Exhibition diary dates

THE EXHIBITION programme for the Business Equipment Trade Association (BETA), which represents the world's second largest business equipment industry, includes the following: London Business Equipment Show, Earls Court Exhibition Centre, London (jointly organised with BED Exhibitions Ltd), October 23-26 1984.



The National Business Equipment Survey recently asked a group of major office-planning consultants and corporate specifiers in the UK to rank six office-design aims in order of importance.

MANUFACTURER'S PROFILE: VICKERS FURNITURE

Vickers plans 'a secret weapon'

VICKERS FURNITURE, Britain's leading manufacturer of steel office furniture, storage and filing systems, has what some executives call a new 'secret weapon' to launch on the highly-competitive systems furniture market, early next year.

Company officials are clearly optimistic about the new development which is believed to combine the best of European and U.S.-style systems. Heavy investment has gone into Vickers Furniture's new plant, now has some of the most sophisticated manufacturing equipment in the furniture industry.

Vickers has a continuous product development programme; last year, at the International Business Show, the company launched the latest innovation to its System E range, plus three new ranges of seating.

the telecommunications link-unit reception desk which houses the BT Monarch computer exchange system.

The sales of the UK's largest manufacturer of wooden office furniture, Project, also reflect this growth. Sales of their '4000' systems range have more than doubled in two years and

and storage units for use in UK Government departments, schools and hospitals. Commercial customers range from the Stock Exchange and the main clearing banks to American Express, Diners' Club and Access.

Successful cross-marketing, with the UK company acting as a British agent for the French companies' products, and vice versa, has led to a co-ordinated product development programme.

Vickers Furniture sells through trade dealers as well as directly through its own sales force. The company is the largest supplier of steel desks

and storage units for use in UK Government departments, schools and hospitals. Commercial customers range from the Stock Exchange and the main clearing banks to American Express, Diners' Club and Access.

Successful cross-marketing, with the UK company acting as a British agent for the French companies' products, and vice versa, has led to a co-ordinated product development programme.

Vickers Furniture sells through trade dealers as well as directly through its own sales force. The company is the largest supplier of steel desks

Sector wins new lease of life

Microfilm

MICROFILM is sometimes dismissed as 'old technology' and it is true that the optical disc, able to store 0.5m AA pages on a 12-inch side, at very low cost, has caused ripples in the microfilm business.

In fact, the choice of bulk storage is one of 'bones for corn'. Key factors are the origin of the data; its access frequency and the location of the recipients, how much there is, how long it will be kept, how securely it must be stored and, of course, what the cost is of keeping it.

£12m market

In many cases, when each of these is carefully considered, microfilm wins. According to Mr Gerald Baker, a market research specialist, the UK market alone will be worth £12m in 1984.

Howell expects to sell 5m of its CAR equipment this year. Kodak, Intec and 3M make similar units.

In the financial institutions there are many customer documents bearing signatures of which true facsimiles on microfilm are the only alternative to the paper itself.

Other companies have custom-made paperwork, the originals of which (or a representation) might need viewing when sales or payment queries occur.

Obviously none of these is a candidate for keying. A case might be made for scanning the original document and storing the resulting digital data on optical discs.

labeled by Integrated Automation based on the Thomson CSF disc. A similar system has gone into the U.S. Library of Congress in Washington.

A further likely trend for drawings will be the direct recording of computer-aided design graphical data on to optical disc.

Kodak is developing KIMS (Kodak Image Management System). In this, electronic display features, but the basis of bulk storage remains the roll of 16mm microfilm.

Two systems

The film is accessed using two systems. One is the recently introduced KAR 4000, which allows access to computer files from a previously entered summary details of a specific microfilm frame can be displayed on a screen and keyboard unit.

The second KIMS element is a system which, obeying instructions from a terminal (which can be remote), will select a film cassette from a mass store, find a frame, scan it using semiconductor cameras and make the image available as a digit stream. The images can then be brought up on a

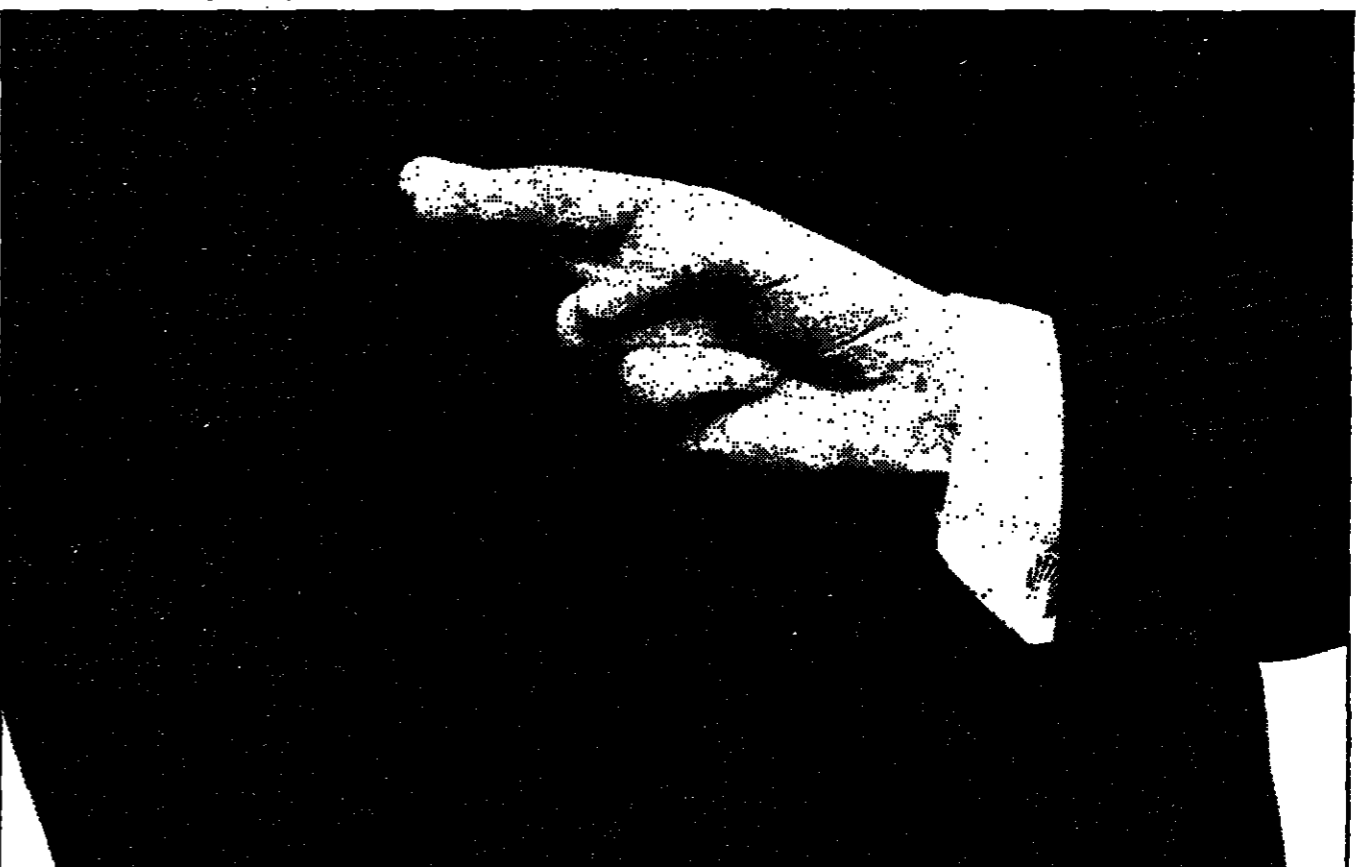
high-resolution cathode ray tube display located almost anywhere.

Kodak has developed an optical disc system of its own (14 inch disc storing 100,000 pages of text). How this can fit into the KIMS approach without invalidating the microfilm element is not clear, since the original documents themselves, if they exist, might as well be scanned and put on the disc.

Systems like KIMS and a similar development from Amouth Systems of Bournemouth (into which an optical disc is about to be incorporated) are expensive and likely to be used only by large organisations needing immediate, remote, multiple terminal access of quite large databases.

For smaller-scale applications, Mr Gerald Frankel, chairman of Intec in Stamford, Middlesex, thinks conventional microfilm has a long way to go yet. For example, it is still very cheap for companies to send monthly updates of data to customers or suppliers via mailed microfilm.

Electronics or not, the microfilm market continues to grow at 10 to 12 per cent a year.



What some people do when they buy a computer.

Buying a computer that's right for your business is often a matter of luck.

However careful you are, you don't know whether you've made the right choice until the computer is actually in use at your office.

Wouldn't it cut the risk factor if you could try the computer before committing yourself? Not by attending a five minute showroom demonstration but by making a proper evaluation in your own business.

Now you can do exactly that. Keep your options open.

Rent a system for as long as you like with no commitment to purchase. When you're convinced it's right for you, buy it at a reduced price or arrange a long term rental.

We stock all the top names so you're sure to find what you're looking for and we also provide a full training programme.

You don't have to keep your fingers crossed when buying or renting a computer from us.

If you want to cut out the risks cut out the coupon.

Select Computing

Cuts out the risky business.

Dorcan House, Meadfield Road, Langley, Slough SL3 8AL. Tel: 0753 44878

A coupon form with fields for Name, Company, Address, Tel, and a checkbox for 'I'm interested in trying a computer before I buy. Send me information on your microcomputers. I'd like to see other computer products and services.' It also includes a postage stamp and return address: Select Computing, a division of Instrument Rentals, UK Ltd, P.O. Box 10, Drayton House, Meadfield Road, Slough, SL3 8AL.

Office Equipment 10

Moving offices may well bring wide benefits to companies but these are often only fully achieved if employees are offered an attractive relocation package when moving with the company

Key factors in office relocation

Moving offices to new areas

SUE SHORTLAND

WHEN AN organisation considers relocating to another part of the country, a number of vital factors must be borne in mind.

The suitability of the new area and the physical processes and requirements of the move itself must be considered in depth. But, an organisation's staff are indeed a valuable asset. Key staff from the old location will need encouragement if they are going to move with their company. And if it is considered that it is in the organisation's best interest for as many of the existing staff—junior as well as senior—to move with it as well, then they, too, will need to see the benefits of relocation.

Moving to a new area not only means that staff have to find somewhere new to live, but they also have to consider the prospects of new employment for the spouse and new schools for the children. No one likes being uprooted from an area where they have ties—family and friends.

So, in order to encourage employees to move, many companies draw up relocation packages to ease the financial burden. Organisations may offer a basic set of allowances for lower-graded staff but give more help to senior employees.

The scope of a relocation package can be very broad. It typically contains the following:

- House-hunting allowances—these generally include payments of or towards travelling expenses to and from the new location. They may also cover subsistence costs—such as hotel and meal costs—while the employee and spouse look at properties.
- Allowances
- House move allowances—these cover removal costs, insurance premiums for the cover of personal effects during the move plus any furniture storage charges.
- Disturbance allowances—these help to cover the cost of moving house and may take the form of a flat-rate payment or be paid as a percentage of the salary. The cost of decorating the new property, the cleaning and refitting of carpets, the alteration or purchase of curtains, the cost of telephone installation and reconduction charges for gas and electricity may be covered in the disturbance allowance or may be paid as separate allowances.
- Sale/purchase allowance—the relocation package generally includes the reimbursement of legal fees, building society survey fees, estate agents' fees and may also cover land registry fee, stamp duty and architects' fees.

Employers may, therefore, offer bridging loans interest-free for a certain period. But if the employee has been unable to sell the old property at the end of this period, the employer is in an awkward position. If the employee's services are highly valued, it is not in the employer's interest to start clawing back the bridging loan at high interest rates—the employee may at the worst decide to stay put in the old location and leave the company or, at best, suffer reduced morale.

Alternative

An alternative is for the employing organisation to use the services of a professional relocation company. These specialists (the main ones include Black Horse Relocation, Homequity Relocation, Mann Countrywide Relocation, Merrill Lynch Relocation and Simmons Relocation) offer guaranteed home-sale programmes.

Under these programmes, the relocation company buys the employee's old property at an appraised price. The employee receives the cash for the house and so is at the end of the housing chain when buying property in the new location.

This means that the process of selling the employee's old property is speeded up as the relocation company which is then responsible for selling it as soon as possible. The employee invests in the new area and can move and settle down more quickly.

The organisation which engages the relocation company pays a management fee as well as incurring costs such as valuation and solicitor's fees—but this can work out cheaper than a lengthy bridging loan.

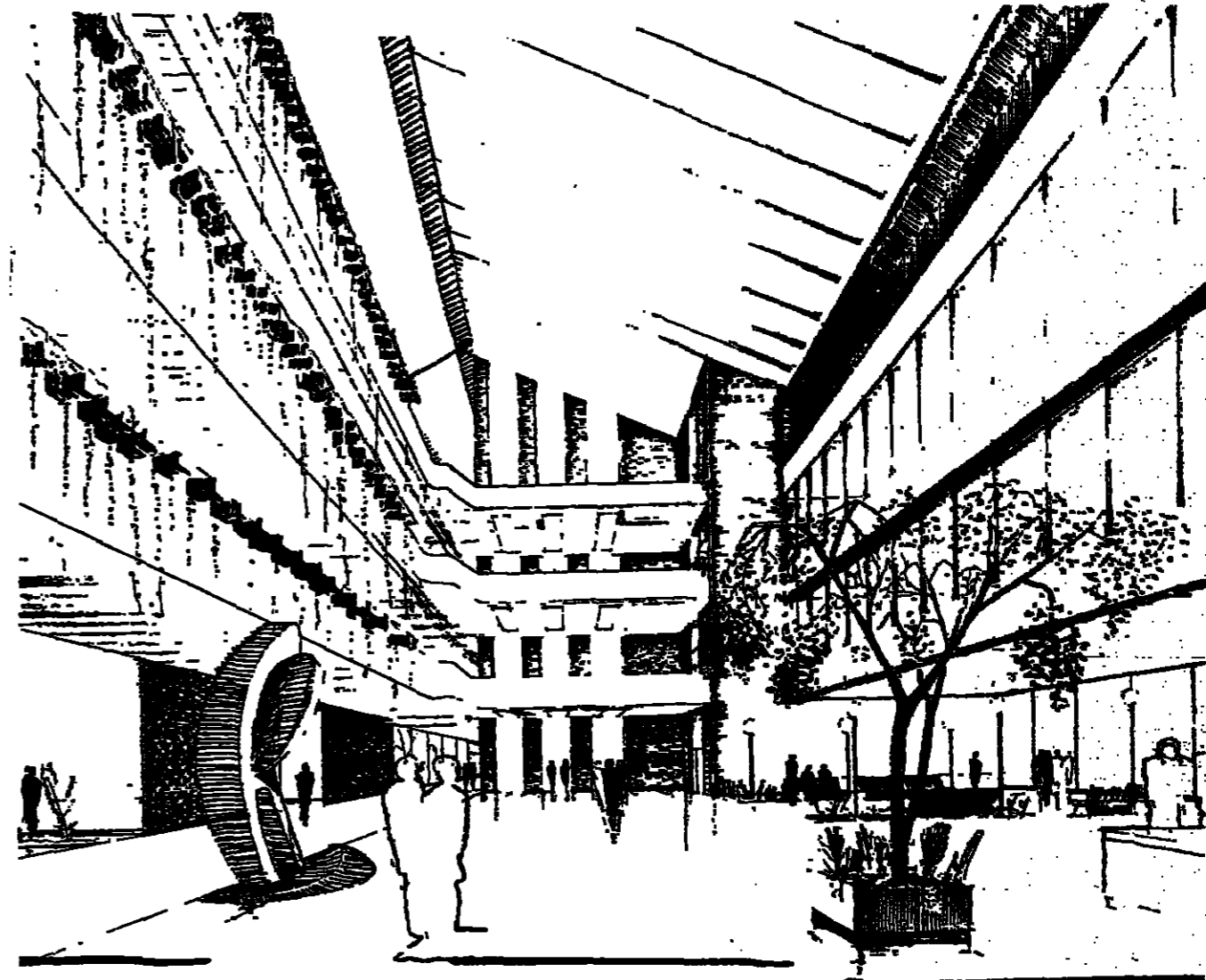
Problems can arise, however, when a company relocates from an area of low-priced housing to one where prices are significantly higher.

The relocated employee will need to raise extra money for a higher mortgage—and, indeed, may not wish to transfer with the company if prices are too high.

Some companies try to help employees (in general, key senior staff) in such circumstances. The assistance that may be offered is usually known as excess mortgage allowance. The allowance is commonly based on the difference between the employee's old and new mortgages and reduces each year for an agreed period (generally no longer than nine years).

The employer and the employee can share the cost of the excess mortgage. For example, the company may pay half the additional mortgage cost for the first couple of years after the move and the allowance is then reduced each year with the employee paying a larger share of the cost until, after, say, seven years, the employer's contribution is reduced to zero.

As companies decide to relocate in order to reap the benefits of more suitable locations, the issue of keeping valuable employees becomes a prime consideration. An attractive relocation package can make all the difference as to whether staff move with the firm or leave its employment.



Rank Xerox expects to have the highest concentration of electronic workstations at its £30m UK headquarters at Marlow. Above: the entrance area which will house a permanent exhibition of the company's products

Plan for 800 electronic workstations



Mr Derek Horaby, executive director, Rank Xerox planning investment of £10,000 in machinery for each senior secretary

WHEN THE new £30m "international" headquarters of Rank Xerox opens in the UK in 1986, it is expected to have the highest concentration of electronic workstations in Europe.

The "showcase" complex is to be built at Marlow, in the heart of the Buckinghamshire countryside. The headquarters will cover nearly 1m sq ft and accommodate 850 people, most of whom will be moving from the company's present buildings in London's Euston Road and at Uxbridge and Aylesbury.

Ethernet

The new headquarters is intended to meet the company's needs well into the 21st century, says Mr Derek Horaby, executive director. Each of the 800 "knowledge workers" in the complex will

have a workstation, linked to the Xerox Ethernet cable. Ethernet enables office machines such as electronic typewriters, word processors and microcomputers to exchange information electronically and to link up to printers, electronic files and telecommunications services.

Mr Horaby says that the most powerful Xerox workstation, the 8010, which was originally designed for executives, will be provided for many of the company's senior secretaries, as well as managers.

"Just a few years ago the investment in machinery for a senior secretary was a few hundred pounds for a typewriter at Marlow it will be some £10,000 per person," he says.

The Xerox 8010 workstation will be used to create and amend documents; to build graphics from a set of basic

shapes; to receive information over Ethernet and to send information via E-mail to be distributed, filed or printed; to act as a teletype for linking to Telex; and as a terminal to the mainframe computers, including access to artificial intelligence.

Worldwide

Satellite communications will link the Marlow headquarters with Xerox Corporation's headquarters in Stamford, Connecticut and to other Rank Xerox companies around the world.

The company's relocation to Marlow is expected to lead to cash savings of £2m a year as it will reduce duplication of central services, while also providing accommodated sitting for an operation at the forefront of changes in office technology.

MICHAEL WILTSHIRE

Innovation abounds in all sectors

CONTINUED FROM PAGE 1

"til tomorrow," comments an OED analyst. "Anyone who can make a copier that breaks down as seldom, for example, as a vacuum cleaner, must be on to a winner."

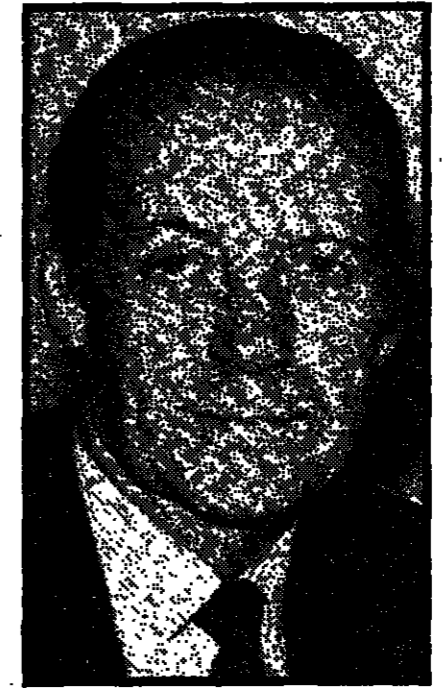
The Japanese dominate the world's production of low and medium-volume copiers—even Xerox in the U.S. gets its low-volume copiers from its Japanese associate company. Canon, the Japanese office copier manufacturer, has consolidated its position in the UK market. It had 21 per cent of the nearly 150,000-unit market last year—against 14 per cent for its nearest rival Rank Xerox, according to a survey by the magazine, "What To Buy For Business." The market share figures are estimates of numbers sold, rather than value.

In turnover terms, Rank Xerox leads, largely because of its strength in the big copier market, says the report.

Office furniture: After several lean years, sales in this sector are rising fast as offices instal computer-related furniture systems. The storage needs for today's computer print-outs are different from the stationery of the past. So, too, is the furniture needed to support, house and protect technology.

Above all, office staff are becoming aware of the need for better, more well-ventilated, vibrationless, temperate surroundings, then many of Europe's 50m office workers are not going to be content with bare room furniture.

Research clearly shows that today's integrated furnishing systems help staff to achieve the best results from the computer equipment.

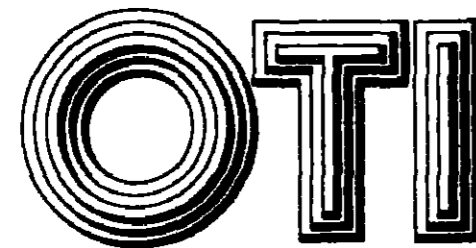


Mr Richard Palmer, director-general of the British Equipment Trade Association: the flourishing market reflects the revolution in office administration

ducts and not enough in the way of unique items.

Success has gone to those companies which have produced real innovations, that is Xerox and its copiers and IBM and the golf ball typewriter.

But the next generation is now due—and this does not only apply to expensive machines. The typewriter, for example, opened the door years ago for all sorts of products (ribbons, carbon paper and so on) but far greater opportunities now exist for new technology office products.



OFFICE TECHNOLOGIES INTERNATIONAL

THE SOFTWARE LEADERS ON WANG

Office Information Systems

Systems written for:

- * Portfolio management
- * Banking
- * Insurance Brokers
- * Bespoke list processing enhancements for Wang installations

01-236 9374/5

Tim Brew

Queens Building, 10-11 Bishops Court, London EC4M 7EL

Selecting Office Furniture.....?

WILKINSONS manufacturers of desking, storage systems, screens and chairs offer a comprehensive and integrated range of client services

We will work closely with you to solve problems, stage by stage, using a co-ordinated approach from start to finish to achieve.....

THE OPTIMUM SOLUTION

for further information contact

CLIENT SERVICES UNIT

0977-791191



Wilkinson's Furniture Limited West Yorkshire, WF8 2J5 Tel: 01927 791191
London Showroom, 11-13 Newland Street, London W1. Telephone: 01-580 836/8

A member of Hillsdown Holdings Limited Group of Companies

HOW TO GET YOUR BUSINESS AHEAD OF THE TIMES...

Come to the Autumn Business Fair hosted by President Office Furniture. You'll see all the latest ranges including Genesis... plus the launch of a completely new range of office systems furniture.

Ring Helena Arenson on 09276 7211 for your personal invitation.

Arenson Group PLC, Radlett, Herts.



JUST ABOUT ALL THE FURNITURE AN OFFICE NEEDS

FOR £13.07 A WEEK

We can supply all the furniture above for only £13.07 a week (plus V.A.T.) on a 3 year lease. And there's hardly any waiting. You can have it from stock in 10 days or less. It's part of the complete range of



black arrow

748 London Road Hounslow Middlesex
Tel: 01-572 7474 TELELEX: 8955498

furniture which Black Arrow can install at a moments notice. And we're always prepared to quote on plant, machinery and equipment. Call us on this number and we'll let you have full details.

IT'S THE LEASE WE CAN DO

As equipment-buyers soon discover, discounting is rife across many sectors in the U.S., as profit margins are extremely tight in the UK.

End-users may wonder why the challenging opportunities in the industry produce so little in the way of profit many equipment manufacturers. The answer probably is that there are simply too many suppliers with too many pro-